

# **MODEL W1744 12" HEAVY DUTY JOINTER**



## **OWNER'S MANUAL**

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## **WARNING!**

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

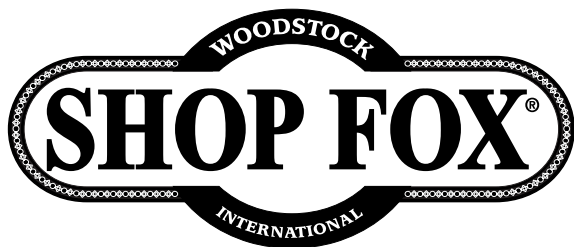
The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

## **WARNING!**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.



# Model W1744

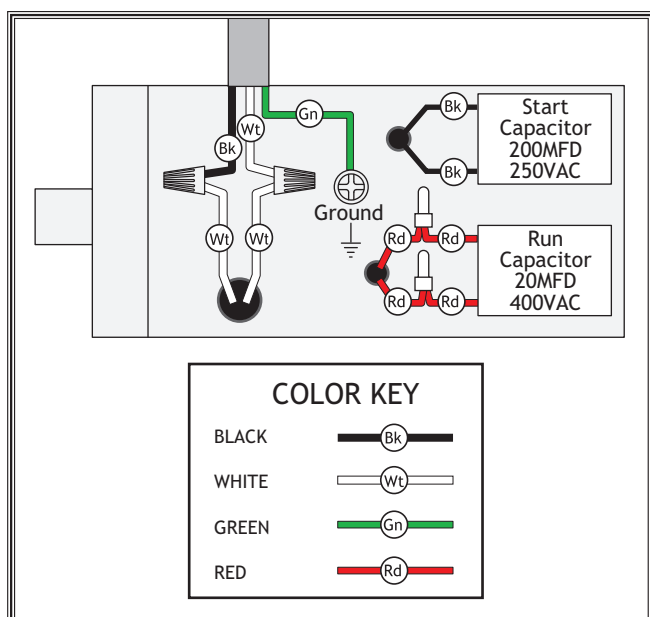
## 12" HEAVY DUTY JOINTER

### MANUAL UPDATE

This update covers changes made to the machine after the owner's manual was printed. Keep this update with your owner's manual for future reference. *If you have questions, contact Tech Support at (360) 734-3482 or by email at [tech\\_support@shopfox.biz](mailto:tech_support@shopfox.biz).*

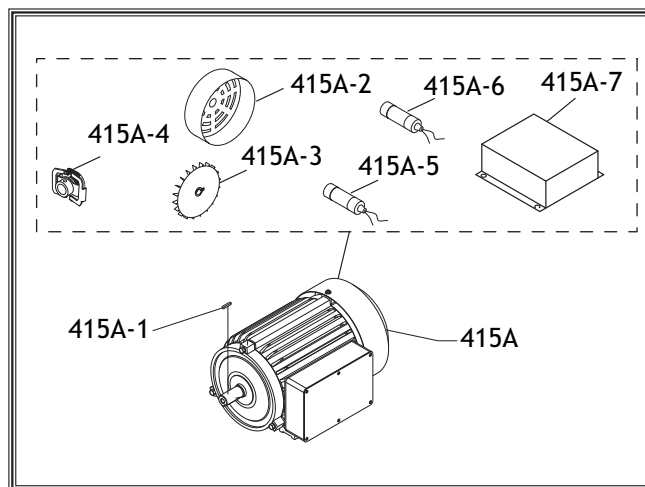
### Why the Update?

We recently re-designed the Model W1744 motor and changed the capacitor wiring. **Figure 1** shows the new motor wiring.



**Figure 1.** Model W1744 new motor and capacitor wiring.

### New Parts for W1744



**Figure 2.** W1744 new motor breakdown.

| REF    | PART #      | DESCRIPTION                 |
|--------|-------------|-----------------------------|
| 415A   | X1744415A   | MOTOR 3HP 220V V2.03.08     |
| 415A-1 | XPK33M      | KEY 5 X 5 X 45              |
| 415A-2 | X1744415A-2 | MOTOR FAN COVER V2.03.08    |
| 415A-3 | X1744415A-3 | MOTOR FAN V2.03.08          |
| 415A-4 | X1744415A-4 | CENTRIFUGAL SWITCH V2.03.08 |
| 415A-5 | X1744415A-5 | S CAPACITOR 200M 250V       |
| 415A-6 | X1744415A-6 | R CAPACITOR 20M 400V        |
| 415A-7 | X1744415A-7 | JUNCTION BOX V2.03.08       |

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**USE THE QUICK GUIDE PAGE LABELS TO SEARCH OUT INFORMATION FAST!**

# INTRODUCTION

## Woodstock Technical Support

We stand behind our machines! In the event that questions arise about your machine, parts are missing, or a defect is found, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz). Our knowledgeable staff will help you troubleshoot problems and send out parts for warranty claims.

If you need the latest edition of this manual, you can download it from <http://www.shopfox.biz>. If you still have questions after reading the latest manual, or if you have comments please contact us at:

Woodstock International, Inc.  
Attn: Technical Support Department  
P.O. Box 2309  
Bellingham, WA 98227

## About Your New Jointer

Your new **SHOP FOX®** Jointer has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

The Model W1744 is capable of a wide variety of surface jointing/planing, edge jointing, rabbeting, and beveling operations. The handwheels allow you to make precision table adjustments, the control panel is easily accessible and the solid cabinet provides a vibration dampening base for smooth-quality cuts. The Model W1744 also features parallelogram bed adjustment and extra tall 5<sup>3</sup>/<sub>8</sub>" cast-iron fence. Woodstock International, Inc. is committed to customer satisfaction in providing this manual. It is our intent to include all the information necessary for safety, ease of assembly, practical use and durability of this product.

# Specifications

## Motor:

Type ..... TEFC Capacitor Start Induction  
 Horsepower..... 3 HP  
 Phase / Voltage.....Single-Phase / 220V  
 Amps..... 18A  
 Cycle / RPM .....60 Hertz / 3450 RPM  
 Switch ..... Magnetic w/Thermal Overload Protection  
 Power Transfer .....Belt Drive  
 Bearings..... Sealed Ball Bearings

## Capacity:

Maximum Depth of Cut (per pass) .....  $\frac{1}{8}$ "  
 Maximum Rabbeting Depth .....  $\frac{3}{4}$ "  
 Maximum Width of Cut ..... 12"  
 Cutterhead Speed ..... 4950 RPM  
 Cuts Per Minute..... 19,800

## Overall Dimensions:

Table Size ..... 13" W x 83" L  
 Height (from floor to table) .....  $31\frac{11}{16}$ "  
 Overall Length ..... 84"  
 Overall Width ..... 33"  
 Shipping Weight ..... 1,036 lbs.  
 Net Weight ..... 875 lbs.  
 Carton Size .....  $88\frac{3}{8}$ " x  $29\frac{3}{4}$ " x  $40\frac{1}{2}$ "  
 Stand Footprint .....  $44\frac{1}{4}$ " x 17"  
 Cutterhead ..... 4-Knife  
 Cutterhead Diameter .....  $3\frac{3}{4}$ "  
 Cutterhead Knife Size .....  $12$ " x  $1\frac{1}{8}$ " x  $1\frac{9}{64}$ "

## Construction:

Tables ..... Parallelogram Design, Precision Ground Cast Iron  
 Fence Assembly ..... Cast Iron  
 Body Assembly ..... Cast Iron  
 Stand ..... One Piece Steel Cabinet  
 Guard ..... Moulded Aluminum  
 Bearings ..... Shielded and Lubricated

## Features:

..... Parallelogram Beds  
 ..... Top Mount Switch Controls  
 .....  $5\frac{3}{8}$ " Tall Fence  
 ..... Included 5" Dust Port  
 ..... Included Push Blocks

## Controls and Features

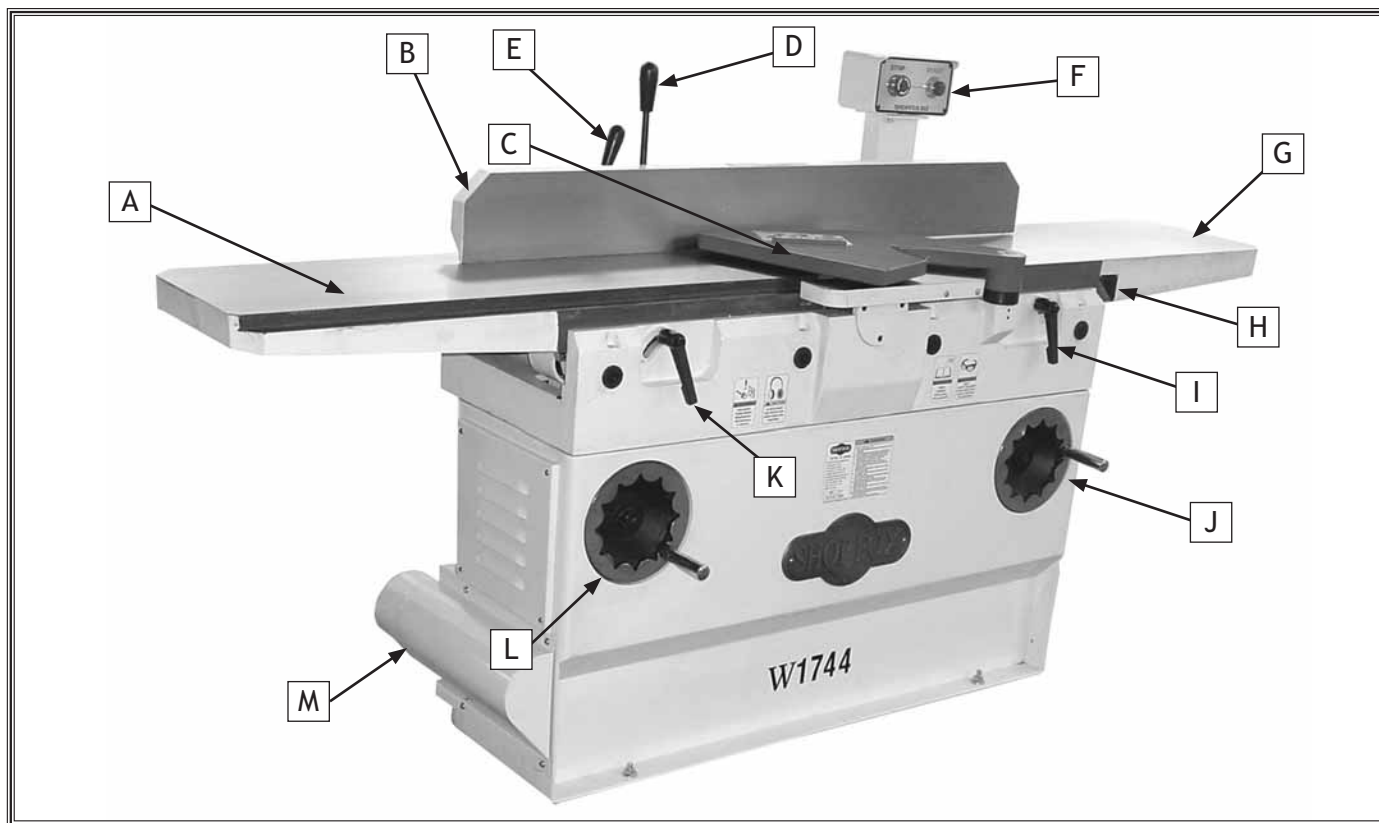


Figure 1. W1744 controls and features.

- A. Outfeed Table
- B. Fence
- C. Cutterhead Guard
- D. Fence Tilt Lever
- E. Fence Lock Handle
- F. Control Panel
- G. Infeed Table
- H. Depth Scale
- I. Infeed Table Lock
- J. Infeed Table Adjustment Handwheel
- K. Outfeed Table Lock
- L. Outfeed Table Adjustment Handwheel
- M. Dust Port



# SAFETY

**READ MANUAL BEFORE OPERATING MACHINE.  
FAILURE TO FOLLOW INSTRUCTIONS BELOW WILL  
RESULT IN PERSONAL INJURY.**

## **DANGER**

Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

## **WARNING**

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

## **CAUTION**

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.

## **NOTICE**

This symbol is used to alert the user to useful information about proper operation of the equipment, and/or a situation that may cause damage to the machinery.

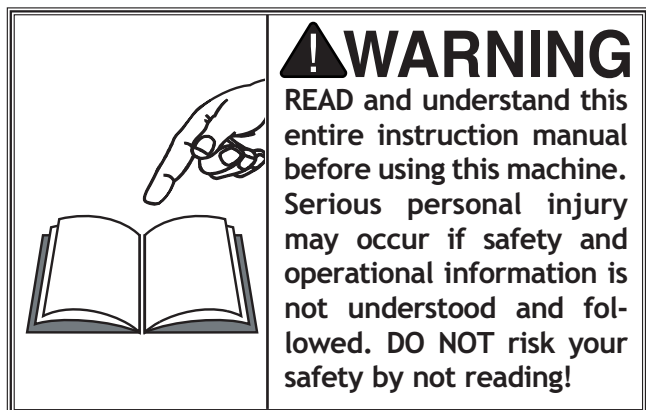
## Standard Safety Instructions

1. **READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eye-glasses only have impact resistant lenses—they are NOT safety glasses.
3. **ALWAYS WEAR AN ANSI APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
6. **NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.
7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power off and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery ON.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **BE AWARE THAT CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Make sure you know the hazards associated with the type of dust you will be exposed to and always wear a respirator approved for that type of dust.

# Additional Safety Instructions for Jointers

## SAFETY



1. **JOINTER KICKBACK.** "Kickback" is when the workpiece is thrown off the jointer table by the force of the cutterhead. Always use push blocks and safety glasses to reduce the likelihood of injury from "kickback." If you do not understand what kickback is, or how it occurs, **DO NOT** operate this machine.
2. **CUTTERHEAD ALIGNMENT.** Keep the top edge of the outfeed table aligned with the edge of the knife at top dead center (TDC) to avoid kickback and personal injuries.
3. **PUSH BLOCKS.** Always use push blocks whenever surface planing. Never pass your hands directly over the cutterhead without a push block.
4. **WORKPIECE SUPPORT.** Supporting the workpiece adequately at all times while cutting is crucial for making safe cuts and avoiding injury. Never attempt to make a cut with an unstable workpiece.
5. **KICKBACK ZONE.** The "kickback zone" is the path directly through the end of the infeed table. Never stand or allow others to stand in this area during operation.
6. **MAXIMUM CUTTING DEPTH.** The maximum cutting depth for one pass is  $\frac{1}{8}$ ". Never attempt any single cut deeper than this!
7. **JOINTING WITH THE GRAIN.** Jointing against the grain or jointing end grain is dangerous and could produce chatter or excessive chip out. Always joint with the grain.
8. **KEEPING GUARDS IN PLACE.** With the exception of rabbeting, all operations must be performed with the guard in place. After rabbeting, be sure to replace the guard.
9. **PROPER CUTTING.** When cutting, always keep the workpiece moving toward the outfeed table until the workpiece has passed completely over the cutterhead. Never back the work toward the infeed table.
10. **USING GOOD STOCK.** Jointing safety begins with your lumber. Inspect your stock carefully before you feed it over the cutterhead. Never joint a board that has loose knots, nails, or staples. If you have any doubts about the stability or structural integrity of your stock, **DO NOT** joint it!

## Avoiding Potential Injuries



**Figure 2.** Correct operator and workpiece position, guard is in place, and push blocks are being used.



**Figure 3.** Never surface plane without push blocks!



**Figure 5.** Never stand directly behind the workpiece!



**Figure 4.** Never plane/edge-joint with the guard removed!



**Figure 6.** Never joint end grain!

## 220V Operation

The SHOP FOX® Model W1744 is prewired for 220 volt, single-phase operation. The motor supplied with your new Model W1744 jointer is rated at 3 HP and will draw approximately 18 amps. For 220V operation, we recommend using a NEMA L6-20 plug and receptacle (see Figure 7). For 220V operation, only connect your machine to a circuit that is protected by a 20 amp circuit breaker.

**⚠ CAUTION:** Using a circuit breaker rated higher than 20 amps will increase the risk of fire!

Keep in mind that a circuit being used by other machines or tools at the same time will add to the total load being applied to the circuit. Add up the load ratings of all machines on the circuit. If this number exceeds the rating of the circuit breaker or fuse, use a different circuit.

## Extension Cords

We do not recommend using an extension cord for 220V equipment. Instead, arrange the placement of your machinery and installed wiring to eliminate the need for extension cords. If you must use an extension cord, please use the following guidelines:

- Use cords rated for Standard Service
- Never exceed a length of 50 feet
- Use cords with 12 ga. wire or bigger
- Ensure cord has a ground wire and pin
- Do not use cords in need of repair

## Grounding

This machine must be grounded! The electrical cord supplied with this machine does not come with a 220 volt plug. Use a plug with a ground pin. If your outlet does not accommodate a ground pin, have it replaced by a qualified electrician or have an appropriate adapter installed and grounded properly. An adapter with a grounding wire does not guarantee the machine will be grounded. A ground source must be verified.

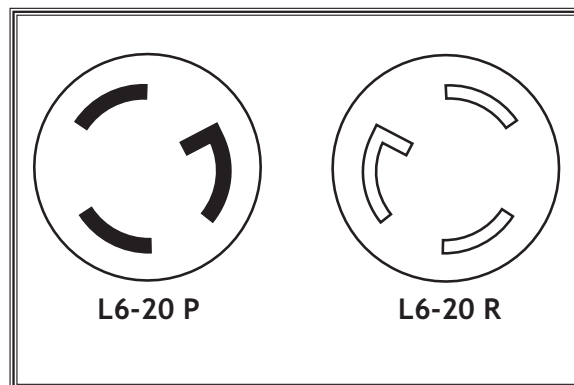
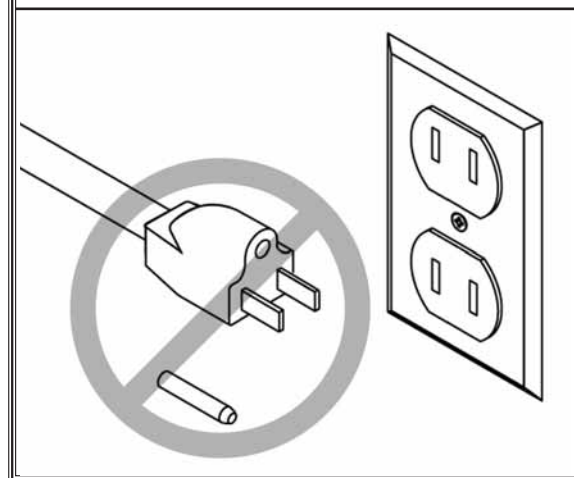


Figure 7. L6-20 220V 3-prong plug and outlet.

## ⚠ WARNING

This equipment must be grounded. Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. If it is not, it will be necessary to run a separate 12 AWG copper grounding wire from the outlet to a known ground. Under no circumstances should the grounding pin be removed from any three-pronged plug or serious injury may occur.



# SET UP

## Unpacking

The **SHOP FOX®** Model W1744 has been carefully packaged for safe transporting. If you notice the machine has been damaged, please contact your authorized **SHOP FOX®** dealer immediately.



**!WARNING**


**SUFFOCATION HAZARD!**

Immediately discard all plastic bags and packing materials to eliminate suffocation hazards for children and animals.

## Items Needed for Set Up

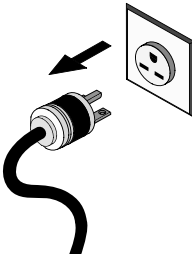
The following items are needed, but not included, to setup your machine:

- Safety Glasses (for each person).....1
- Solvent .....1
- Shop Rags for Cleaning ..... As Needed
- Extra Person for Lifting Help .....1
- Fork Lift, Engine Hoist, or Boom Crane .....1
- Lifting Straps (900 lb. Capacity) .....2
- Straightedge (see **Page 17**).....1
- Phillips Screwdriver #2 .....1



**!WARNING**

**READ** and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. **DO NOT** risk your safety by not reading!



**!WARNING**

**UNPLUG** power cord before you do any assembly or adjustment tasks! Otherwise, serious personal injury to you or others may occur!



# Inventory

The following is a description of the main components shipped with the **SHOP FOX®** Model W1744. Lay the components out to inventory them.

| Wood Crate Contents (Figure 8 & 9)     | Qty |
|--|-----|
| A. Stand Assembly .....                | 1   |
| B. Fence Assembly .....                | 1   |
| C. Fence Bracket.....                  | 1   |
| D. Push Blocks .....                   | 2   |
| E. Knife Setting Jig (Not Shown) ..... | 1   |

| Tools and Hardware (Not Shown)              | Qty    |
|---|--------|
| • Hex Wrenches 3, 4, 8, 10mm .....          | 1 Each |
| • Open End Wrench 10/12, 12/14, 17/19mm.... | 1 Each |

| Assembly Fasteners (Not Shown)             | Qty |
|--|-----|
| • Cap Screws M12-1.75 x 30 (Fence) .....   | 2   |
| • Flat Washers 12mm (Fence) .....          | 3   |
| • Lock Washers 12mm (Fence) .....          | 2   |
| • Lock Nut M12-1.75 (Fence) .....          | 1   |
| • Flat Washers 10mm (Pedestal) .....       | 2   |
| • Cap Screws M10-1.5 x 25 (Pedestal) ..... | 2   |

If any parts appear to be missing, examine the packaging carefully to be sure those parts are not among the packing materials. If any parts are missing, find the part number in the back of this manual and contact Woodstock International, Inc. at (360) 734-3482 or at [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz)

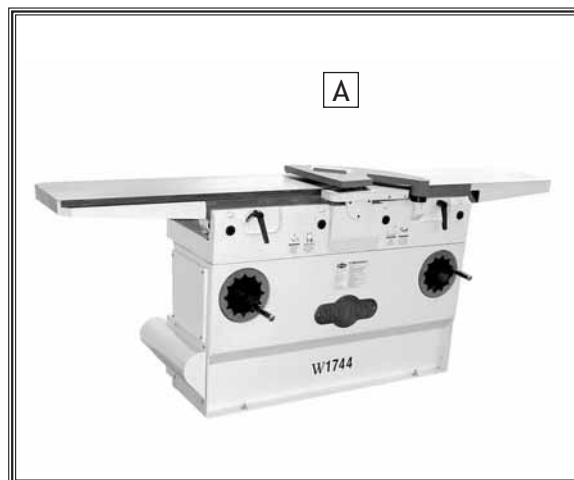


Figure 8. Box 1 contents.

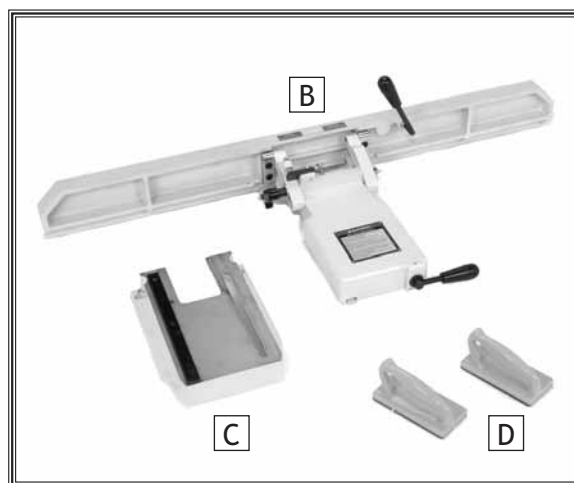


Figure 9. Additional box 1 contents.

## NOTICE

When ordering replacement parts, refer to the parts list and diagram in the back of the manual.

## NOTICE

Some hardware/fasteners on the inventory list may arrive pre-installed on the machine. Check these locations before assuming that any items from the inventory list are missing.

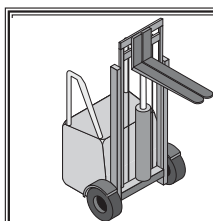
## Machine Placement

- **Floor Load:** This machine distributes a heavy load in a small footprint. Some floors may require additional bracing to support both machine and operator.
- **Working Clearances:** Consider existing and anticipated needs, size of material to be processed through the machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your jointer.
- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.

## Lifting Jointer

The Model W1744 requires the use of lifting equipment such as a forklift, engine hoist or boom crane. DO NOT lift the machine by hand.

If you are unsure how to lift this jointer, consult a qualified professional.



### **WARNING**

USE power lifting equipment to lift this Jointer. Otherwise, serious personal injury may occur.

To lift the jointer, do these steps:

1. Wrap lifting straps around the infeed and outfeed tables. Position the straps as close to the base as possible to prevent damaging the tables.
2. With lifting straps positioned evenly, lift the jointer (**Figure 10**) off of the pallet and onto the floor.

### **CAUTION**



**MAKE** your shop "child safe." Ensure that your workplace is inaccessible to youngsters by closing and locking all entrances when you are away. **NEVER** allow untrained visitors in your shop when assembling, adjusting or operating equipment.



**Figure 10.** Model W1744 supported evenly by two lifting straps.



## Cleaning Machine

The table and other unpainted parts of your jointer are coated with a waxy grease that protects them from corrosion during shipment. Clean this grease off with a solvent cleaner or citrus-based degreaser. **DO NOT** use chlorine-based solvents such as brake parts cleaner or acetone—if you happen to splash some onto a painted surface, you will ruin the finish.

### CAUTION



**ALWAYS** work in well-ventilated areas far from possible ignition sources when using solvents to clean machinery. Many solvents are toxic when inhaled or ingested. Use care when disposing of waste rags and towels to be sure they **DO NOT** create fire or environmental hazards.

### WARNING



**NEVER** use gasoline or other petroleum-based solvents to clean with. Most have low flash points, which make them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur if this warning is ignored!

## Mounting to Shop Floor

Although not required, we recommend that you mount your new machine to the floor. Because this is an optional step and floor materials may vary, floor mounting hardware is not included. It will be necessary to use a precision level to level your machine.

### Bolting to Concrete Floors

Lag shield anchors with lag bolts and anchor studs (Figure 11) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

### NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine at a later point.



Figure 11. Typical concrete mounting hardware.

## Fence

Make sure the underside of the fence, the top of the carriage and top of the table have been thoroughly cleaned of all the export grease before installing the fence, or the fence will not slide easily and will get quickly gummed up when exposed to sawdust. The fence has a keyway slot built into the underside of it that fits over the key on the table. These keep the fence perpendicular to the cutterhead during adjustments.



### To install the fence:

1. Align the mounting holes on the fence bracket and jointer, and fasten with the M12-1.75 x 30 cap screws, flat washers and lock washers as shown in **Figure 12**.
2. With the help of an assistant, lift the fence assembly over the fence bracket, slip the sliding bushing on the carriage into the slot on the fence bracket, as shown in **Figure 13**, and make sure the key and keyway slot fit snugly.
3. Secure the bolt with a 12mm flat washer and lock nut.

## Checking Cutterhead Guard Operation

Though the cutterhead guard is pre-installed, you should check to make sure it works.

1. Pull the guard back and let it go. The guard should spring back over the cutterhead.
  - If the guard drags across the table, raise it slightly so it won't drag.
  - If the guard does not spring back over the cutterhead, loosen the set screws shown in **Figure 14**, remove the cutterhead guard, and reinstall it so the flat part of the guard shaft faces the set screws. Check to make sure the cutterhead guard works.

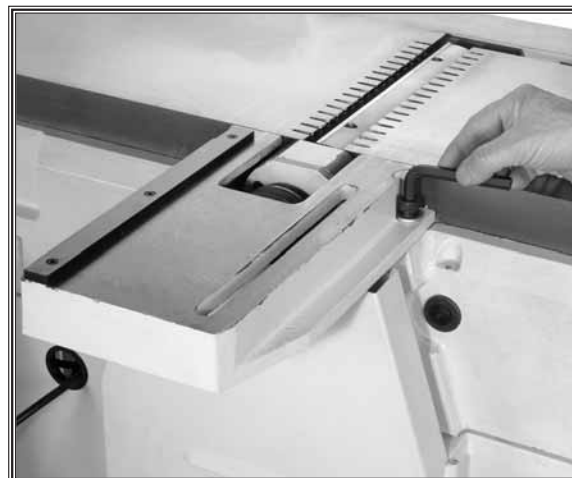


Figure 12. Installing fence bracket.

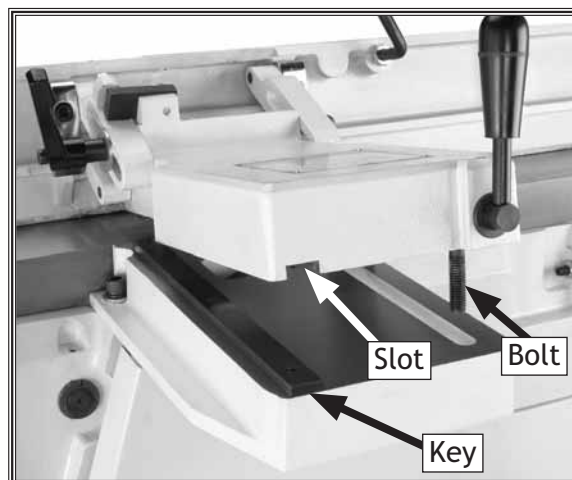


Figure 13. Installing fence assembly.

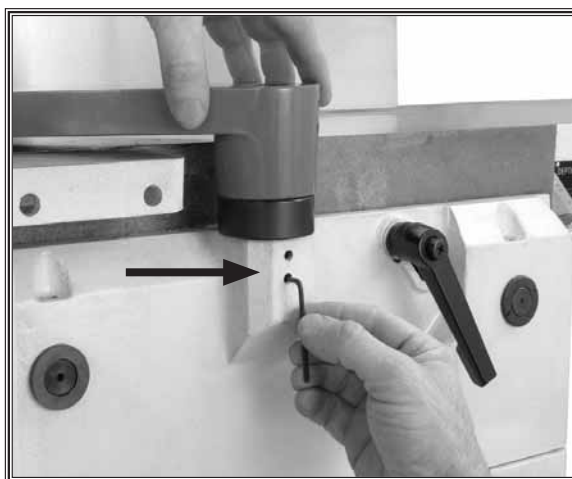


Figure 14. Removing cutterhead guard.

## Pedestal Switch

The pedestal switch is upside down for shipping purposes.

To set up the pedestal switch, do these steps:

1. Remove the M10-1.5 x 25 cap screws and flat washers shown in **Figure 15**.
2. Turn the pedestal upright and fasten it to the jointer with the cap screws and washers removed in **Step 1**, as shown in **Figure 16**.



**Figure 15.** Location to remove pedestal mounting hardware (one side shown).



**Figure 16.** Mounting pedestal in upright position.

## Knife Setting Jig

Assemble the jig as shown in Figure 17.

## Checking Outfeed Table Height

The outfeed table **MUST** be level with the knives when they are at top-dead-center or the workpiece cannot be feed across the jointer safely. The outfeed table height is factory set, but we recommend that you check it to make sure that it didn't change during shipping.

To check the outfeed table height, do these steps:

1. Place a straightedge on the outfeed table so it extends over the cutterhead.
2. Rotate the cutterhead pulley until one of the knives is at top-dead-center (TDC), as illustrated in Figure 18.

When correctly set, the knife will barely touch the straightedge, as shown in Figure 19.

- If your outfeed table is correctly set, no adjustments are necessary.
- If the knife lifts the straightedge off the table or it is below the straightedge, then the outfeed table must be re-set. Refer to **Setting Outfeed Table Height** on Page 36.

## Dust Port

The dust port is installed at the factory, so just attach it to an adequate dust collection system.

**Recommended CFM at Dust Port:** ..... 615 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must take into account many variables, including the CFM rating of the dust collector, the length of hose between the dust collector and the machine, the amount of branches or wyes, and the amount of other open lines throughout the system. Explaining this calculation is beyond the scope of this manual. If you are unsure of your system, consult an expert or purchase a good dust collection "how-to" book.



Figure 17. Knife setting jig assembly.

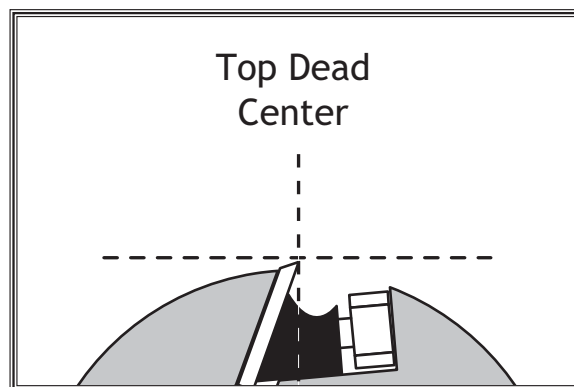


Figure 18. Cutterhead knife at top-dead-center.

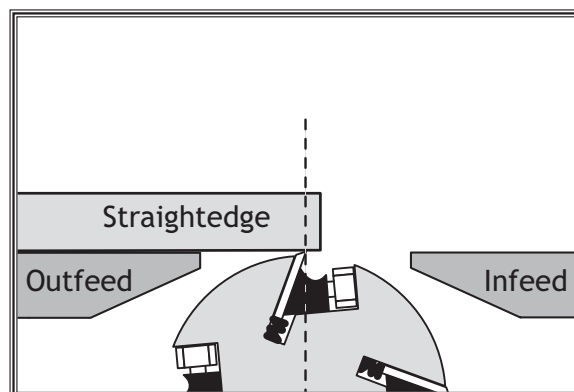


Figure 19. Using a straightedge to align outfeed table height with knife at TDC.

## ⚠ CAUTION

**DO NOT** operate the Model W1744 without an adequate dust collection system. This machine creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

## Test Run

Complete this process once you have familiarized yourself with all instructions in this manual. The purpose of the test run is to make sure the motor is working properly before proceeding.

To begin the test run, do these steps:

1. Read the entire instruction manual first!
2. Make sure all tools and foreign objects have been removed from the machine.
3. Review **Page 10** and connect your machine to the power source.
4. Make sure the red STOP button is in the out position by twisting it.
5. Turn the jointer **ON**.
  - The jointer should run smoothly with little or no vibration.
  - Immediately turn the jointer **OFF** if you suspect any problems, and refer to **Page 43** to trouble-shoot/fix any problems before starting the jointer again.
  - If the source of an unusual noise or vibration is not readily apparent, contact our technical support for help at (360) 734-3482 or contact us online at [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz).

### WARNING



Projectiles thrown from the machine could cause serious eye injury. Wear safety glasses during assembly and operation.

### WARNING



Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing rolled up and long hair tied up and away from machinery.

# OPERATIONS

## General

The Model W1744 will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. **If at any time you are experiencing difficulties performing any operation, stop using the machine!**

If you are an inexperienced operator, we strongly recommend that you read books, trade articles, or seek training from an experienced jointer operator before performing any unfamiliar operations. **Above all, your safety should come first!**

### WARNING



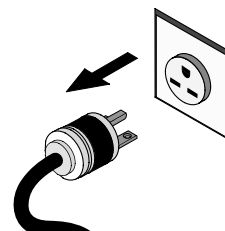
**READ** and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. **DO NOT** risk your safety by not reading!

### WARNING



**Always** wear safety glasses when operating the jointer. Failure to comply may result in serious personal injury.

### WARNING



**DO NOT** investigate problems or adjust the jointer while it is running. Wait until the machine is turned **OFF**, unplugged and all working parts have come to a complete stop before proceeding!

## Basic Controls

This section covers the basic controls used during routine operations.

**START Button:** Starts motor only if the STOP button is in the out position (**Figure 20**).

**STOP Button:** Stops motor when pushed in and disables the START button. Enable the START button by twisting the STOP button until it springs forward in the out position.

**Table Movement:** To move the infeed table, loosen the table lock (**Figure 21**), move the table with the table handwheel in the preset range, then tighten the table lock. The outfeed table is preset with no range of movement allowed, so if it gets accidentally unlocked it will not move. To adjust the preset range of movement, refer to **SERVICE** about setting table heights.

**Fence Movement:** The fence has a lock handle that keeps it in position (**Figure 22**). To move the fence, loosen the lock handle and slide the fence where needed.

**Fence Tilting:** The tilt lock (**Figure 22**) secures the fence at any position in the available range. The stop block sets the fence tilt to 90°. Positive stops stop the fence at 45° inward and 45° outward, for common 45° bevel cuts. Even when the fence is resting against the positive stops, the tilt lock must be tightened before cutting.

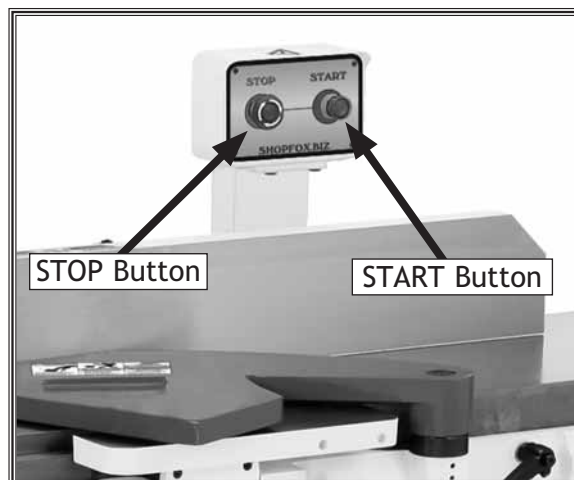


Figure 20. START/STOP button locations.

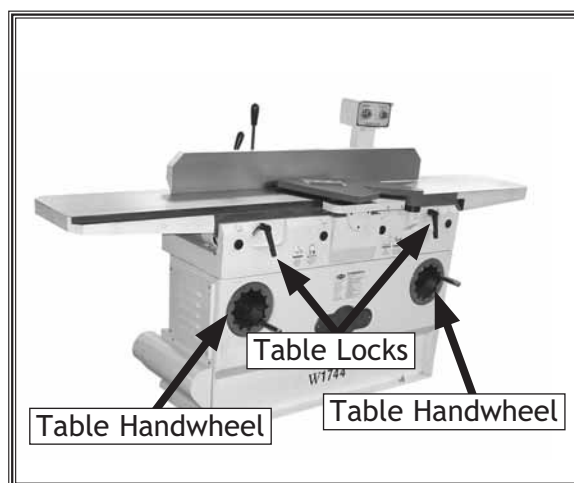


Figure 21. Table control locations.

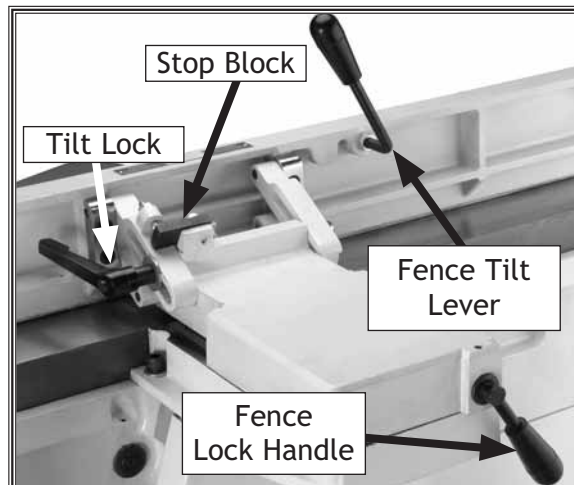


Figure 22. Fence lock, tilt lock and stop block locations.



# Stock Inspection and Requirements

Here are some rules to follow when choosing and jointing stock:

- **DO NOT joint or surface plane stock that contains knots.** Injury to the operator or damage to the workpiece can occur if the knots become dislodged during the cutting operation.
- **DO NOT joint or surface plane against the grain direction.** Cutting against the grain increases the likelihood of stock kickback, as well as tear-out on the workpiece.
- **Jointing and surface planing with the grain produces a better finish and is safer for the operator.** Cutting with the grain is described as feeding the stock on the jointer so the grain points down and toward you as viewed on the edge of the stock (Figure 23).

**Note:** If the grain changes direction along the edge of the board, decrease the cutting depth and make additional passes.

- **Remove foreign objects from the stock.** Make sure that any stock you process with the jointer is clean and free of any dirt, nails, staples, tiny rocks or any other foreign objects that may damage the jointer blades.
- **Only process natural wood fiber through your jointer.** Never joint MDF, particle board, plywood, laminates or other synthetically made materials.
- **Make sure all stock is sufficiently dried before jointing.** Wood with a moisture content over 20% will cause unnecessary wear on the knives and poor cutting results.
- **Make sure your workpiece exceeds the minimum dimension requirements (Figures 24 & 25) before edge jointing or surface planing, or it may break or kick back during the operation!**

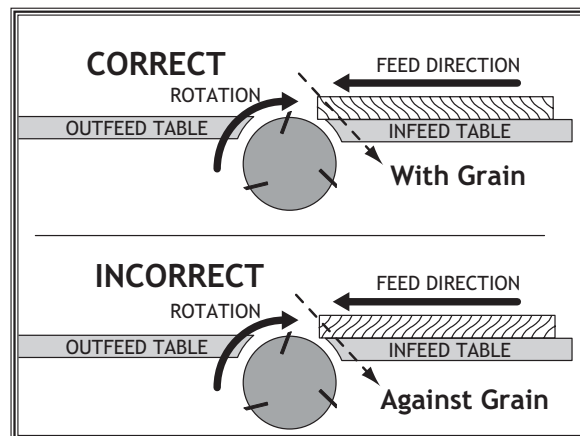


Figure 23. Correct setting for grain alignment.

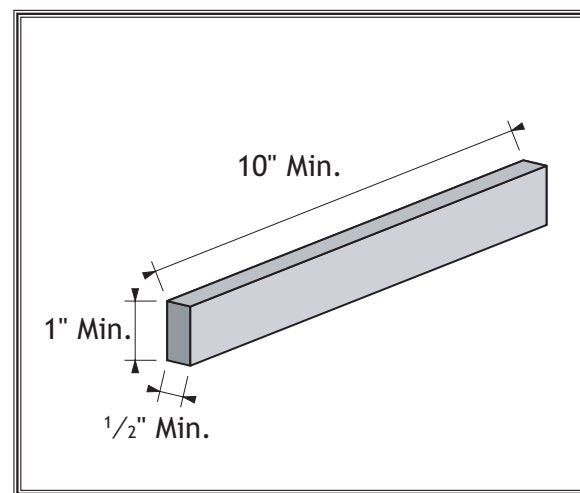


Figure 24. Minimum dimensions for edge jointing.

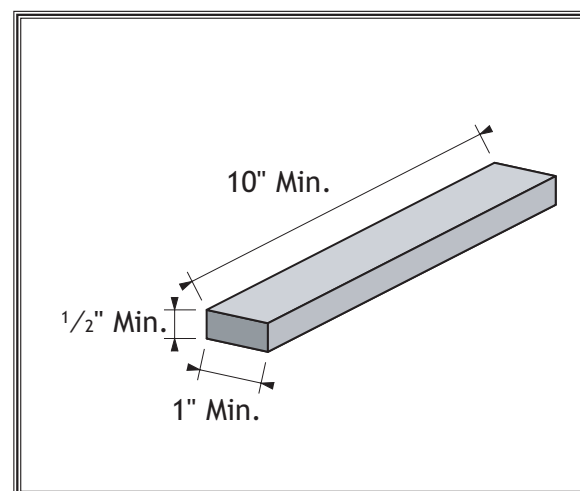


Figure 25. Minimum dimensions for surface planing.



# Squaring Stock

Squaring stock involves four steps performed in the order below:

1. **Surface Plane On The Jointer:** The concave face of the workpiece is surface planed flat with the jointer (Figure 26).
2. **Surface Plane On a Thickness Planer:** The opposite face of the workpiece is surface planed flat with a thickness planer (Figure 27).
3. **Edge Joint On The Jointer:** The concave edge of the workpiece is jointed flat with the jointer (Figure 28).
4. **Rip Cut On A Table Saw:** The jointed edge of the workpiece is placed against a table saw fence and the opposite edge cut off (Figure 29).

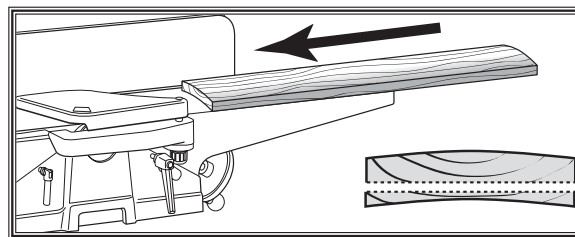


Figure 26. Surface plane on the jointer.

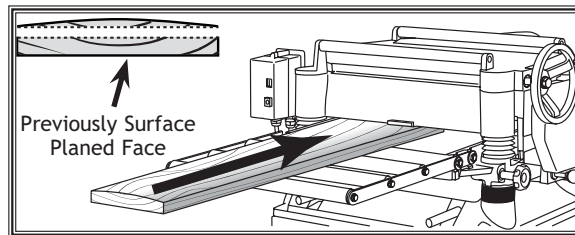


Figure 27. Surface plane on a thickness planer.

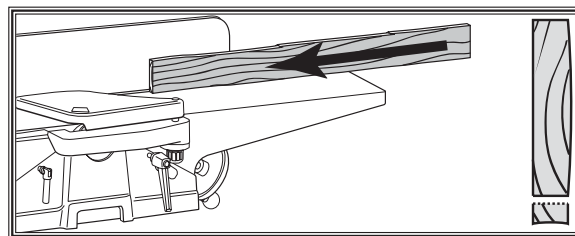


Figure 28. Edge joint on the jointer.

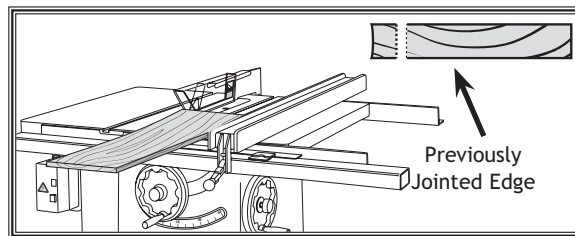


Figure 29. Rip cut on a table saw.

## Surface Planing

The purpose of surface planing on the jointer is to make one flat face on a piece of stock (see **Figures 30 & 31**) to prepare it for surface planing on a thickness planer.

### NOTICE

If you are not experienced with a jointer, set the depth of cut to 0, and practice feeding the workpiece across the tables as described. This procedure will better prepare you for the actual operation.

To surface plane on the jointer, do these steps:

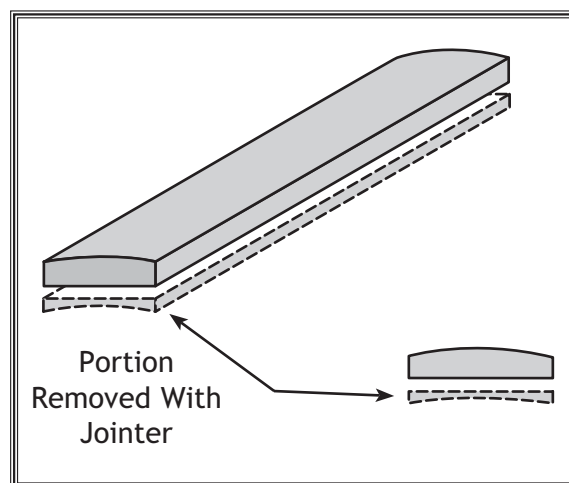
1. Read and understand **SAFETY**, beginning on **Page 6**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection & Requirements** instructions, beginning on **Page 21**.
3. Set the cutting depth for your operation. (We suggest  $\frac{1}{32}$ " for surface planing, using a more shallow depth for hard wood species or for wide stock.)
4. Make sure your fence is set to  $90^\circ$
5. If your workpiece is cupped (warped), place it so the concave side is face down (**Figure 31**) on the surface of the infeed table.
6. Start the jointer.
7. With a push block in each hand, press the workpiece against the table and fence with firm pressure, and feed the workpiece over the cutterhead (**Figure 30**).

**Note:** If your leading hand (with push block) gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

8. Repeat **Step 7** until the entire surface is flat.



**Figure 30.** Typical surface planing operation.



**Figure 31.** Illustration of surface planing results.

### ⚠ WARNING

Failure to use push blocks when surface planing may result in cutterhead contact, which will cause serious personal injury. Always use push blocks to protect your hands when surface planing on the jointer.

## Edge Jointing

The purpose of edge jointing is to produce a finished, flat-edged surface (see **Figures 32 & 33**) that is suitable for joinery or finishing. It is also a necessary step when squaring rough or warped stock.

### NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.

To edge joint on the jointer, do these steps:

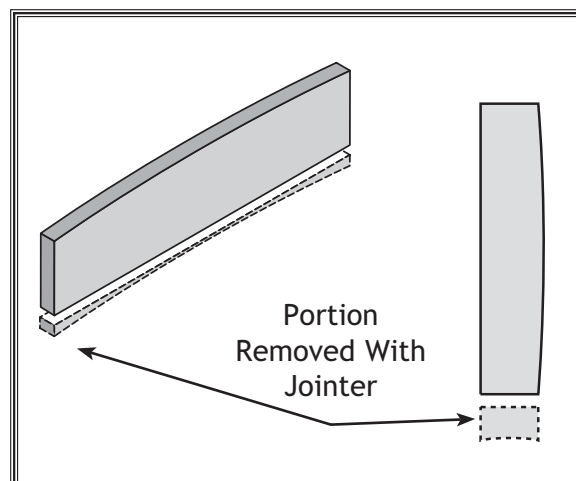
1. Read and understand **SAFETY**, beginning on **Page 6**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection** instructions, beginning on **Page 21**.
3. Set the cutting depth for your operation. **Note:** We suggest between  $\frac{1}{16}$ " and  $\frac{1}{8}$ " for edge jointing, using a more shallow depth for hard wood species or for wide stock.
4. Make sure the fence is set to 90°.
5. If your workpiece is cupped (warped), place it so the concave side is face down (**Figure 33**) on the surface of the infeed table.
6. Start the jointer.
7. Press the workpiece against the table and fence with firm pressure. Use your trailing hand to guide the workpiece through the cut, and feed the workpiece over the cutterhead (See **Figure 32**).

**Note:** If your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place it on the portion of the workpiece that is over the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

8. Repeat **Step 7** until the entire edge is flat.



**Figure 32.** Typical edge jointing operation.



**Figure 33.** Illustration of edge jointing results.

## Bevel Cutting

The purpose of bevel cutting is to cut a specific angle into the edge of a workpiece (see **Figures 34 & 35**).

The Model W1744 has preset fence stops at 45° inward, 90°, and 45° outward (135°). If your situation requires a different angle, the preset fence stops can be easily adjusted for your needs.

To bevel cut on the jointer, do these steps:

1. Read and understand **SAFETY**, beginning on **Page 6**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection** instructions, beginning on **Page 21**.
3. Set the cutting depth for your operation.

**Note:** We suggest between  $\frac{1}{16}$ " and  $\frac{1}{8}$ " for bevel cutting, using a more shallow depth for hard wood species or for wide stock.

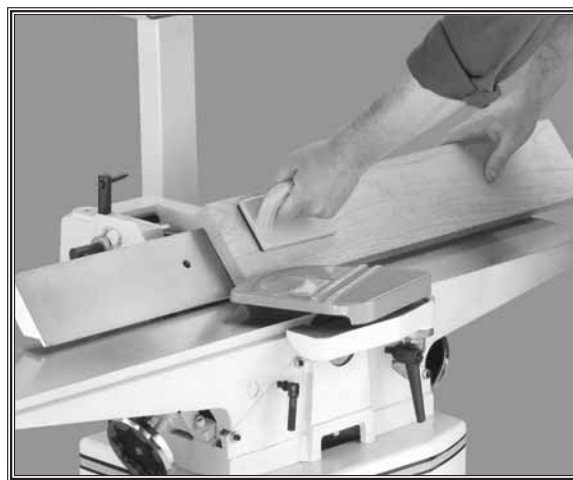
4. Make sure your fence is set to the angle of your desired cut.
5. If your workpiece is cupped (warped), place it so the concave side is face down on the surface of the infeed table.
6. Start the jointer.
7. With a push block in your leading hand, press the workpiece against the table and fence (**Figure 34**) with firm pressure, and feed the workpiece over the cutterhead.

**Note:** If your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

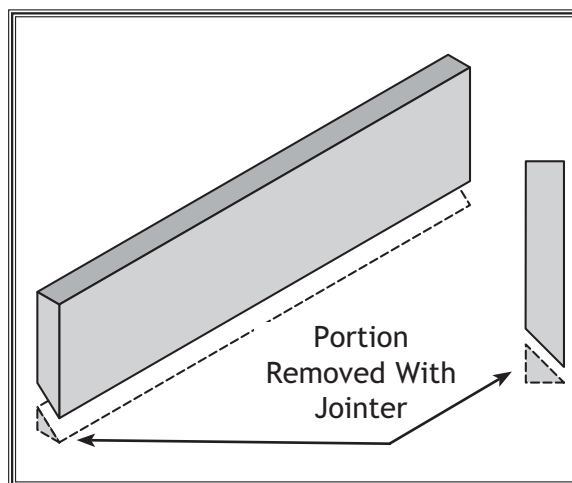
8. Repeat **Step 7** until the angled cut is satisfactory to your needs.

### NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.



**Figure 34.** Typical bevel cutting operation.



**Figure 35.** Illustration of bevel cutting results.

# Rabbet Cutting

The purpose of rabbet cutting is to remove a section of the workpiece edge (see **Figures 36 & 37**). When combined with another rabbet cut edge, the rabbet joints create a simple, yet strong method of joining stock.

To rabbet cut on the jointer, do these steps:

1. Read and understand **SAFETY**, beginning on **Page 6**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection** instructions, beginning on **Page 21**.
3. Set the cutting depth for your operation.

**Note:** We suggest between  $\frac{1}{16}$ " and  $\frac{1}{8}$ " for rabbet cutting, using a more shallow depth for hard wood species or for wide stock.

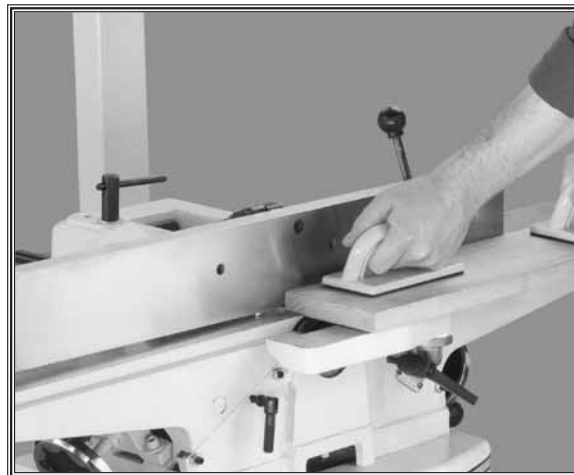
4. Remove the cutterhead guard.
5. Make sure your fence is moved forward, so the amount of infeed/outfeed table exposed is the same as the size of your rabbet. Also, make sure your fence is set to  $90^\circ$
6. Start the jointer.
7. With a push block in each hand, press the workpiece against the table and fence (**Figure 36**) with firm pressure, and feed the workpiece over the cutterhead.

**Note:** If your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

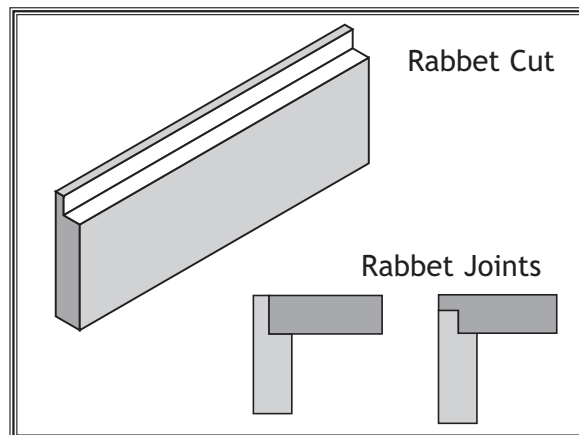
8. Repeat **Step 7** until the your rabbet is cut to depth.

## NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.



**Figure 36.** Typical rabbet cutting operation.



**Figure 37.** Illustration of rabbet cutting effects and a few sample joints.

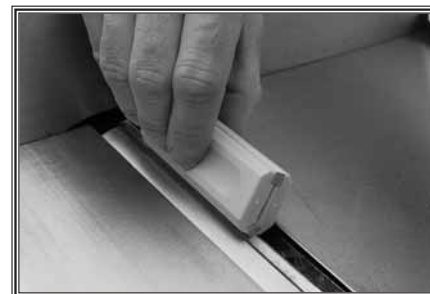
## ⚠ WARNING

When the cutterhead guard is removed, attempting any other cut besides a rabbet directly exposes the operator to the moving cutterhead. **ALWAYS** replace the cutterhead guard after rabbet cutting!

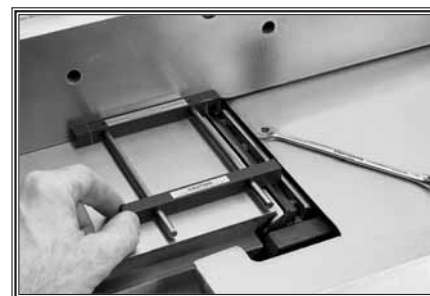
## Jointer Accessories

The following jointer accessories may be available through your local Woodstock International Inc. Dealer. If you do not have a dealer in your area, these products are also available through online dealers. Please call or e-mail Woodstock International Inc. Customer Service to get a current listing of dealers at: 1-800 545-8420 or at [sales@woodstockint.com](mailto:sales@woodstockint.com).

The **D1123 Knife Honer** sharpens planer and jointer knives to a razor keen edge without removing them from cutterheads. The honing tool features two 400 grit stones, a flat stone for sharpening bevels, and a diagonal stone for flat edges. Each stone has four surfaces, which can be adjusted to provide a fresh sharpening surface.



The **W1211 Steel Body Jig** is a patented jointer knife setting jig for perfect alignment every time! Allows you to shift nicked knives to get a perfect cut to an accuracy of  $\pm 0.001"$ . We offer knife-setting jigs and extensions for almost all jointers. Made in the USA. Also available: W1210 Polycarbonate Bodied Jig, and W1213 Carbide Jig.





# MAINTENANCE

## General

Regular periodic maintenance on your **SHOP FOX®** Model W1744 will ensure its optimum performance. Make a habit of inspecting your machine each time you use it.

**Check for the following conditions and repair or replace when necessary:**

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords and plugs.
- Damaged V-belts.
- Any other condition that could hamper the safe operation of this machine.

## Cleaning

Cleaning the Model W1744 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

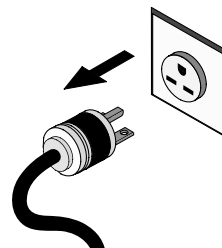
Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep tables rust-free with regular applications of quality metal protectants.

## V-Belts

To ensure optimum power transmission from the motor to the blade, the V-belts must be in good condition (free from cracks, fraying and wear) and properly aligned and tensioned (refer to the instructions on **Page 39**).

## ! WARNING



**MAKE SURE** that your machine is unplugged during all maintenance procedures! If this warning is ignored, serious personal injury may occur.

## Lubrication

Since all bearings are sealed and permanently lubricated, simply leave them alone until they need to be replaced. **DO NOT** lubricate them.

## Maintenance Schedule

- **Daily:**
  - Vacuum all dust on and around the machine.
  - Wipe down tables and all other unpainted cast iron with a metal protectant.
- **Every Month:**
  - V-belt tension, damage, or wear.
  - Clean/vacuum dust buildup from inside cabinet and off of motor.

# SERVICE

## General

This section covers the most common service adjustments or procedures that may need to be made during the life of your machine.

If you require additional machine service not included in this section, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz).

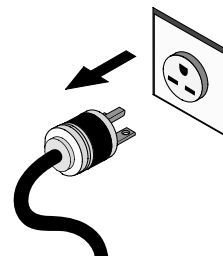
## Inspecting Knives

The height of the knives can be inspected with a straightedge to ensure that they are set evenly with the outfeed table at their highest point in the cutterhead rotation.

To inspect the knives, do these steps:

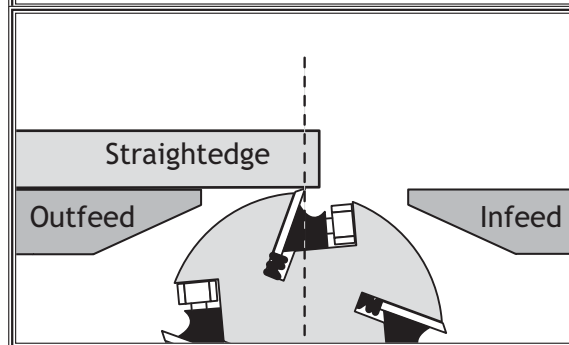
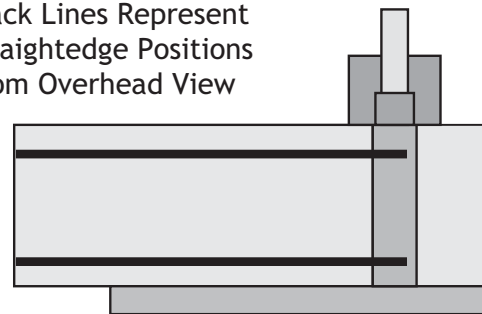
1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Remove the cutterhead guard or block it out of the way.
3. Using a straightedge, check the height of each knife at its highest point in relation to the outfeed table, in each of the straightedge positions, as shown in **Figure 38**.
  - The knives are set correctly when they just touch the bottom of the straightedge in each of the straightedge positions.
  - If the knives do not touch the straightedge or they lift it up in any of the positions, then those knives need to be adjusted.

### WARNING



**MAKE SURE** that your machine is unplugged during all service procedures! If this warning is ignored, serious personal injury may occur.

Black Lines Represent  
Straightedge Positions  
From Overhead View



**Figure 38.** Checking knife height with a straightedge.



# Adjusting/Replacing Knives

Setting the knives correctly is crucial to the proper operation of the jointer and is very important in keeping the knives sharp. If one knife is higher than the others, it will do the majority of the work, and thus, dull much faster than the others.

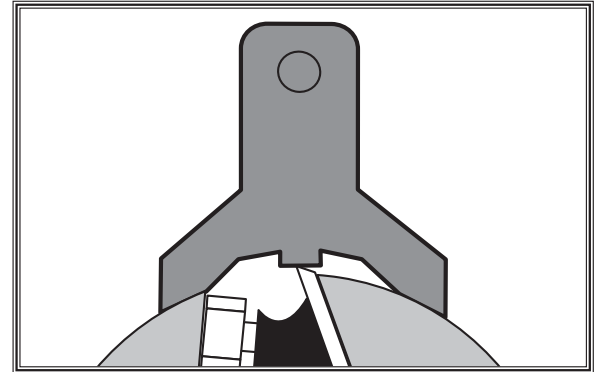
There are two options for setting the knives—the straightedge method and the knife setting jig method. Each option has advantages and disadvantages and the correct one for you will become a matter of personal preference. For best results, the tables must be parallel with each other (**Checking/Adjusting Table Parallelism on Page 34**) and the outfeed table height must be properly set (**Setting Outfeed Table Height on Page 36**).

**Straightedge Method:** A high quality straightedge is held flat against the outfeed table and the knife heights are set to the bottom of the straightedge, as shown in **Figure 38**. Because the knife projection height from the cutterhead is dependent on the outfeed table height, the outfeed table must be set as described in **Setting Outfeed Table Height on Page 36** for this method to work correctly.

When using a straightedge to set the knives, you will not need to move the outfeed table once it is set and you will always be assured that the knives are even with the outfeed table in their highest point of rotation—even if the cutterhead is not parallel with the outfeed table.

**Knife Setting Jig Method:** Both tables are lowered to fit the jig on the cutterhead, as shown in **Figure 39**, and the knife heights are set to just touch the middle pad of the jig.

The knife setting jig makes it easy to ensure that the knives project out of the cutterhead evenly. After using the knife setting jig to set the knives, you have to re-adjust the outfeed table height to ensure that it is even with the knives at their highest point of rotation. If you are using the positive stops on the tables, they will need to also be reset before operation.



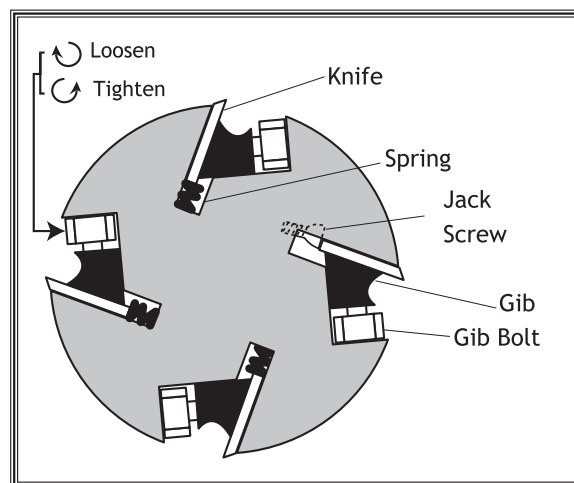
**Figure 39.** Using knife setting jig to set knife height.

The Model W1744 comes with both jack screws and springs inside the cutterhead to provide two options for adjusting the knives (see **Figure 40**).

**Note:** Only one of these options is needed to set the knives—see **Step 5** for clarification.

To adjust/replace the knives, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Remove the cutterhead guard from the table and move the fence back as far as it will go.
3. Open the pulley cover to expose the cutterhead pulley.
4. Rotate the cutterhead pulley to get access to one of the cutterhead knives.
5. Loosen the cutterhead gib bolts, starting in the middle, and alternating back and forth until all of the gib bolts are loose, but not falling out.
  - If this is the first time you are setting the knives, remove the gib and knife from the cutterhead. Decide which adjustment option you are going to use between the jack screws and the springs.
  - If you decide to use the jack screws, remove the springs from the cutterhead (they are located directly below the knives).
  - If you decide to use the springs, just thread the jack screws completely into the cutterhead so they will not get lost. Replace the gib and knife.
6. Remove and clean the gibs and clean inside the cutterhead slot to remove all pitch or sawdust. Coat the knives and gibs with a metal protectant, then fit the gibs back in the cutterhead with the new knives.

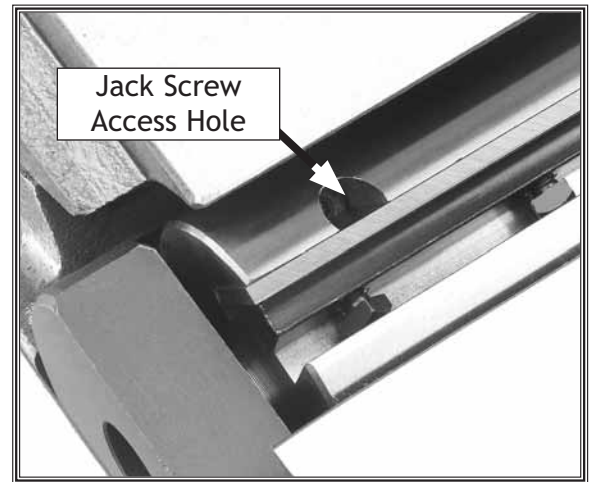


**Figure 40.** Cutterhead profile diagram.

7. Adjusting the knife heights:

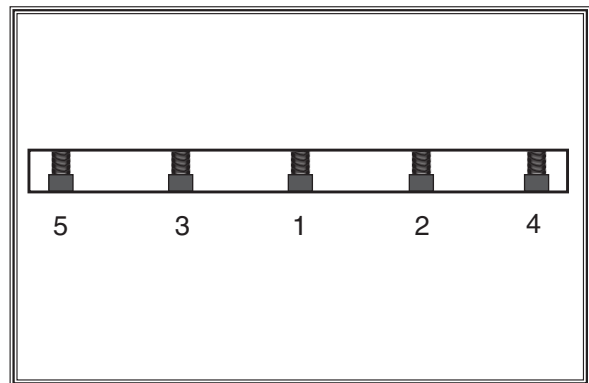
**Jack Screws:** Using a 3mm hex wrench, find the jack screws through the access holes in the cutterhead (**Figure 41**) and rotate the jack screws to raise or lower the knife. When the knife is set correctly, it will barely touch the bottom of the straightedge or the knife setting jig middle pad. Snug the gib bolts tight enough to just hold the knife in place. Repeat on the other side of the cutterhead, then repeat **Steps 5-7** with the rest of the knives.

**Springs:** Push the knife down with the straightedge or middle pad of the knife setting jig, keeping the straightedge flat against the outfeed table or the knife setting jig feet evenly against the cutterhead. Tighten the gib bolts just tight enough to hold the knife in place. Repeat on the other side of the cutterhead, then repeat **Steps 5-7** with the rest of the knives.



**Figure 41.** Jack screw access hole.

8. Rotate the cutterhead to the first knife you started with. Slightly tighten all the gib bolts, starting at the ends and working your way to the middle by alternating left and right (**Figure 42**). Repeat this step on the rest of the knives.



**Figure 42.** Gib bolt tightening sequence.

9. Repeat **Step 8**.

10. Repeat **Step 8**, but final tighten each gib bolt.

11. If you used the knife setting jig to set the knife heights, use the straightedge to adjust the outfeed table height evenly with the knives at top dead center (the highest point in their rotation). If you used the straightedge to set the knife heights, skip to the next step.

12. Replace the cutterhead guard and close the pulley cover.

# Checking/Adjusting Table Parallelism

If the tables are not parallel with the cutterhead or each other, then poor cutting results and kickback may occur.

## Checking Outfeed Table

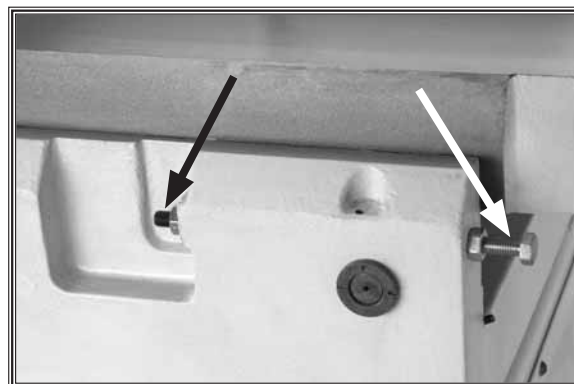
To check the outfeed table parallelism, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Remove the cutterhead guard and fence.
3. Loosen the outfeed table lock located at the front of the machine, and loosen the jam nuts and adjustment bolts located at the back of the machine (see **Figure 43**).
4. Place the straightedge on the outfeed table so it hangs over the cutterhead, and lower the outfeed table until the straightedge just touches the cutterhead body, as shown in **Figure 44** (rotate the cutterhead if necessary).
5. Place the straightedge in the positions shown in **Figure 45**. In each position, the straightedge should touch the cutterhead and sit flat on the outfeed table.
  - If the straightedge touches the cutterhead and sits flat across the outfeed table in each position, then the outfeed table is already parallel with the cutterhead. Check the infeed table to make sure that it is parallel with the outfeed table.
  - If the straightedge does not touch the cutterhead and sit flat on the outfeed table in any of the positions, then the outfeed table is not parallel with the cutterhead. Correct the outfeed table parallelism, then correct the infeed table parallelism.

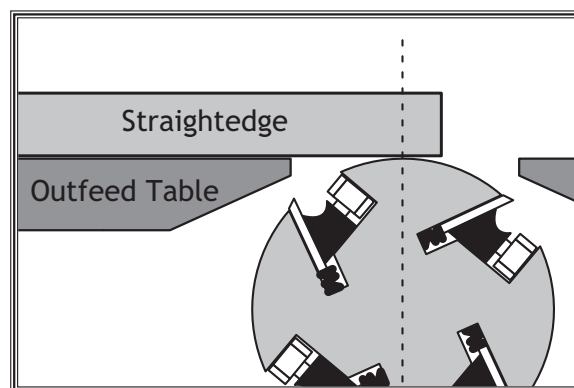
## Checking Infeed Table

To check the infeed table parallelism, do these steps:

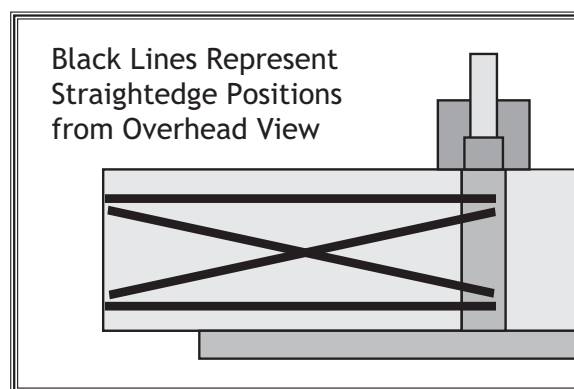
1. Follow all the steps for checking the outfeed table parallelism to first make sure that the outfeed table is parallel with the cutterhead.
2. Raise the outfeed table higher than the cutterhead.



**Figure 43.** Table positive stop bolts.

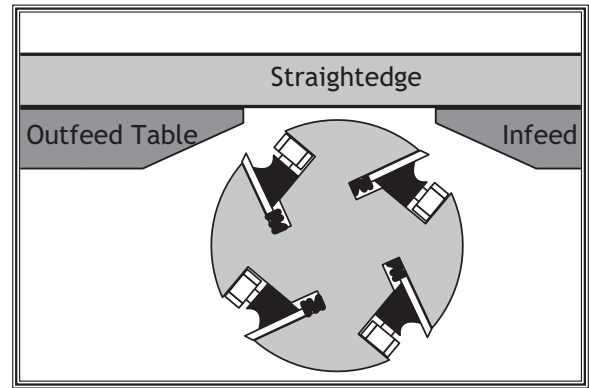


**Figure 44.** Adjusting outfeed table even with cutterhead body.

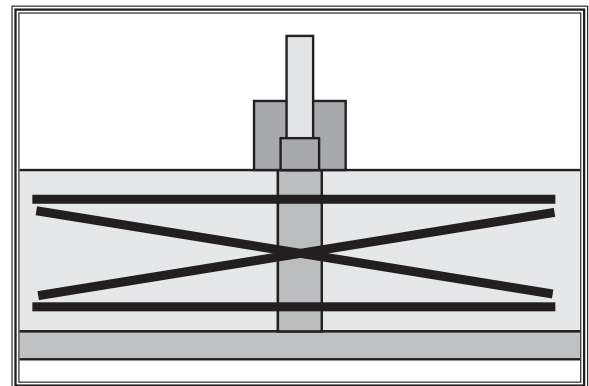


**Figure 45.** Straightedge positions for verifying if outfeed table is parallel with cutterhead.

3. Place the straightedge halfway across the infeed table and halfway over the outfeed table, and adjust the infeed table even with the outfeed table, as shown in **Figure 46**.
4. Place the straightedge in the positions shown in **Figure 47**. In each position, the straightedge should sit flat against both the outfeed table and the infeed table.
  - If the straightedge sits flat against both the infeed and outfeed table, then the tables are parallel.
  - If the straightedge does not sit flat against both the infeed and outfeed table in any of the positions, then the infeed table needs to be adjusted parallel with the outfeed.



**Figure 46.** Infeed and outfeed tables set evenly.



**Figure 47.** Straightedge positions for checking infeed/outfeed parallelism.

## Adjusting Table Parallelism

For safe and proper cutting results, the tables must be parallel to the cutterhead. Adjusting them to be parallel is a task of precision and patience, and may take up to one hour to complete. Luckily, this is considered a permanent adjustment and should not need to be repeated for the life of the machine.

Due to the complex nature of this task, we recommend that you double check the current table positions to make sure that they really need to be adjusted before starting.

The tables have four eccentric bushings under each corner that allow the tables to be adjusted parallel. These eccentric bushings are locked in place by piggybacked set screws (one on top of the other) and adjusted when rotated.

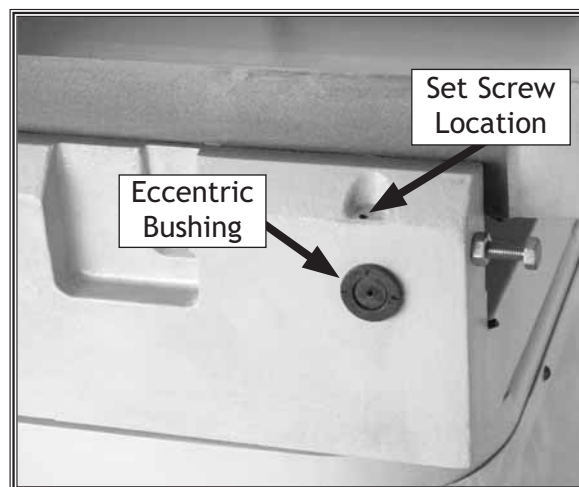
The correct order for adjusting the table parallelism is to first adjust the outfeed table parallel with the cutterhead, then adjust the infeed table parallel with the outfeed table.

When setting the outfeed table, all measurements must be made from the cutterhead body—not the knives—or results may get skewed the next time you change knives.

**IMPORTANT:** The steps below are intended to be performed in succession with the steps involved in checking the outfeed table. Do not continue until you have followed those steps.

To adjust the table parallelism, do these steps:

1. Place the straightedge on the outfeed table so it hangs over the cutterhead, and lower the outfeed table until the straightedge just touches the cutterhead body, as shown in **Figure 44** (rotate the cutterhead if necessary).
2. Remove the set screw from each of the four eccentric bushings (**Figure 48**) under the outfeed table, and loosen the set screws underneath those removed set screws.
3. Place the straightedge in one of the positions shown in **Figure 45**, and adjust the table (a small hammer and punch or pin-type spanner wrench may be necessary to turn the eccentric bushings) so that the straightedge touches the cutterhead while lying flat across the outfeed table. Repeat this step with each of the remaining straightedge positions as many times as necessary until the outfeed table is parallel with the cutterhead.
4. Tighten/replace the set screws in the eccentric bushings on the outfeed table.
5. Remove the set screw from each of the four eccentric bushings under the outfeed table, and loosen the set screws underneath those removed set screws.
6. Place the straightedge halfway across the infeed table and halfway over the outfeed table, and adjust the infeed table even with the outfeed table, as shown in **Figure 46**.
7. Place the straightedge in one of the positions shown in **Figure 47**, and adjust the eccentric bushings under the infeed table so the straightedge lies flat against both tables. Repeat this step with each of the remaining straightedge positions as many times as necessary until the infeed table is parallel with the outfeed table.
8. Tighten/replace the set screws in the eccentric bushings on the infeed table.
9. Set the outfeed table height (refer to the next subsection).
10. Set the knives (refer to **Page 30**).
11. Reinstall the cutterhead guard and fence.



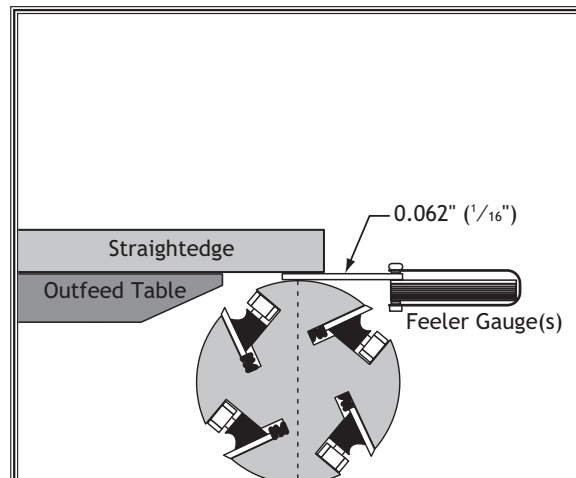
**Figure 48.** Eccentric bushing and set screw location.

# Setting Outfeed Table Height

The outfeed table height must be even with the top of the cutterhead knives. If the outfeed table is set too low, there will be snipe. If the outfeed table is set too high, the workpiece will hit the edge of the outfeed table during operation, increasing the chance of kickback.

**To set the outfeed table height, do these steps:**

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Check/adjust the table parallelism.
3. Remove the cutterhead guard and fence.
4. Loosen the outfeed table lock located at the front of the machine, and loosen the jam nuts and positive stop bolts located at the back of the machine (see **Figure 43**).
5. Place the straightedge on the outfeed table so it hangs over the cutterhead, and lower the outfeed table until the straightedge is 0.062" above the cutterhead body, as determined by using the feeler gauges (see **Figure 49**).
6. Tighten the outfeed table lock located at the front of the machine, and tighten the positive stop bolts and jam nuts located at the back of the machine (see **Figure 43**).
7. Set the knife heights to the new outfeed table height.



**Figure 49.** Using feeler gauge(s) to set outfeed table height.

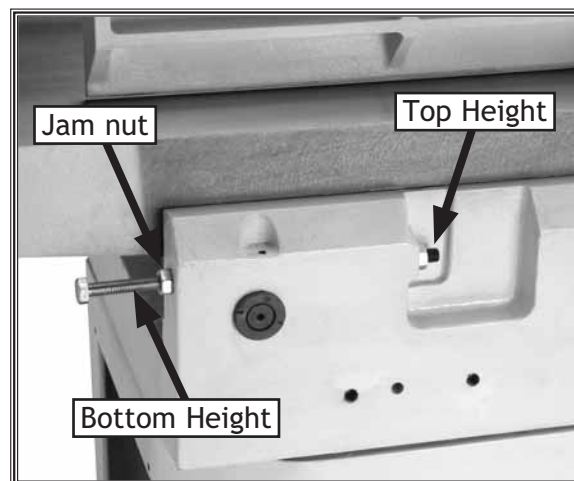


## Setting Infeed Table Height

The infeed table on the Model W1744 has positive stop bolts that, when properly set up, allow the operator to quickly adjust the infeed table between finish/final cuts and shaping/heavy cuts.

We recommend setting the minimum depth of cut to  $\frac{1}{32}$ " and the maximum depth of cut to  $\frac{1}{8}$ " for most operations. DO NOT exceed  $\frac{1}{8}$ " cut per pass on this machine or kickback and serious injury may occur!

Each positive stop bolt (**Figure 50**) controls the top or bottom range of the table movement. The jam nut locks the positive stop bolt in position so it won't move during operation.



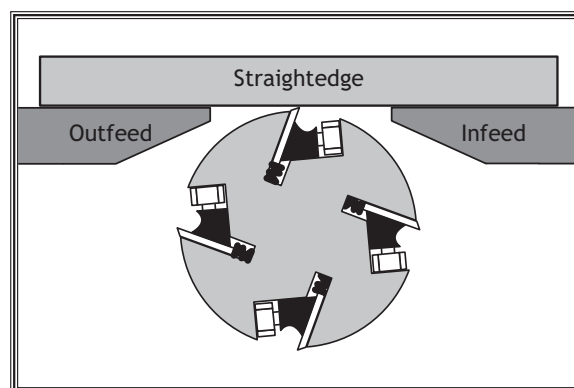
**Figure 50.** Positive stop bolts for infeed table.

## Calibrating Depth Scale

The depth scale on the infeed table can be calibrated or "zeroed" if it is not correct.

To calibrate the depth scale, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Loosen the infeed table positive stop bolts.
3. Use the straightedge to help adjust the infeed table exactly even with the outfeed table, as shown in **Figure 51**.
4. Using a screwdriver, adjust the scale pointer to "0" (**Figure 52**), then reset the infeed table positive stops.



**Figure 51.** Infeed table even with outfeed table.



**Figure 52.** Depth scale adjusted to "0" position.



# Setting Fence Stops

The fence stops simplify the task of adjusting the fence to 45° inward, 90°, and 45° outward (135°).

To set the 45° inward fence stop, do these steps:

1. Tilt the fence approximately 45° inward (**Figure 53**) onto the positive stop bolts using a square.
2. Loosen the jam nut on the 45° inward positive stop bolt shown in **Figure 54**.
3. Adjust the positive stop bolts until the fence is exactly 45° inward while resting on the bolts (verify the angle with a 45° square).
4. Retighten the jam nut loosened in **Step 2**.

To set the 90° fence stop, do these steps:

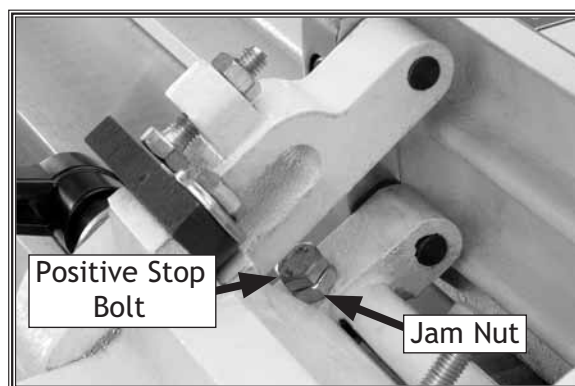
1. Lower the stop block against the fence, as shown in **Figure 55**, and loosen the fence tilt lock.
2. Tilt the fence to the 90° position.
3. Using a 90° square, check the fence angle.
4. If it is not set at exactly 90°, loosen the jam nut and adjust the positive stop bolt until the fence is exactly 90° as shown in **Figure 55**.
5. Tighten the jam nut.

To set the 45° outward fence stop, do these steps:

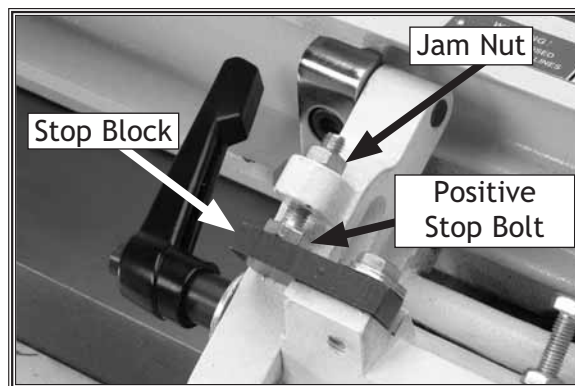
1. Raise the stop block, loosen the fence tilt lock, and position the fence against the 45° outward positive stop bolt.
2. If the fence is not set at exactly 45° outward, loosen the jam nut on the 45° outward fence positive stop bolt (**Figure 56**).
3. Adjust the 45° outward positive stop bolt until the fence is exactly 45° outward while resting on the bolt (check the angle with a sliding bevel set to 135°).
4. Retighten the jam nut loosened in **Step 2**.



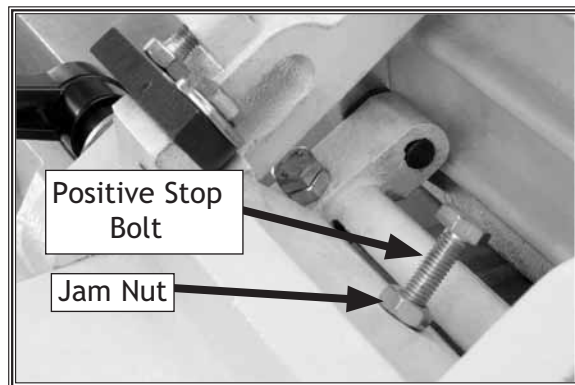
**Figure 53.** Fence adjusted 45° inward.



**Figure 54.** 45° inward positive stop bolt.



**Figure 55.** Adjusting fence to 90°.



**Figure 56.** Adjusting fence 45° outward.

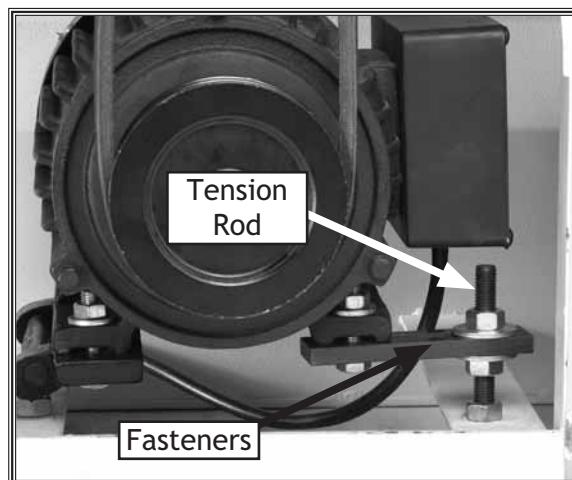
## V-Belts

Inspect the V-belts closely; if you notice fraying, cracking, glazing, or any other damage, replace the belts. A worn or damaged V-belt will not provide optimum power transmission from the motor to the drum and feed belt.

V-belt removal and replacement is simply a matter of loosening the V-belts, rolling them off of the pulleys, replacing them with new belts, then retensioning them.

**To replace the V-belts, do these steps:**

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Open the pulley cover.
3. Loosen the fasteners on the tension rod that hold the motor to the bracket (**Figure 57**).
4. Lift the motor up and slide the V-belts off of the motor pulley and cutterhead pulley.
5. Slide the new belts onto the pulleys and tighten the motor bracket fasteners.



**Figure 57.** Fasteners needed to be loosened for V-belt replacement.

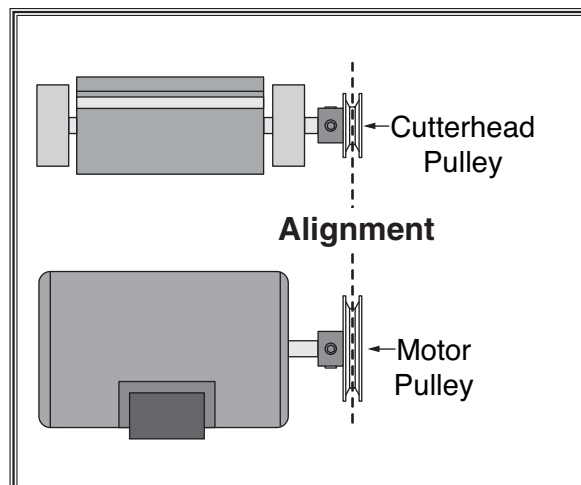
## Pulley Alignment

Pulley alignment is another important factor in power transmission and belt life. The pulleys should be parallel to each other and in the same plane (coplaner) for optimum performance.

Each pulley can be adjusted by loosening the motor mount fasteners, sliding the motor in or out, and retightening the fasteners to lock the motor pulley in place.

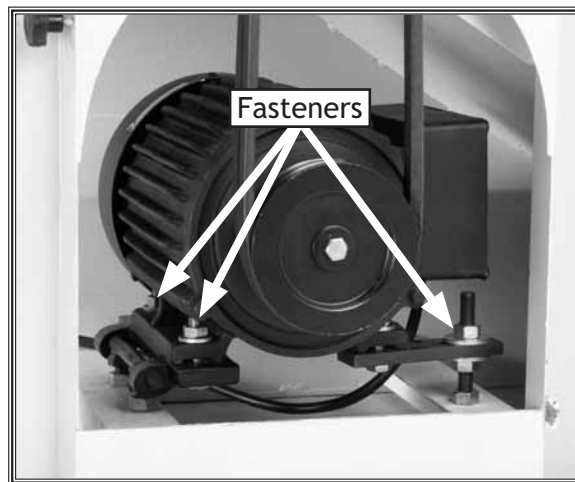
**To align the pulleys, do these steps:**

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Open the pulley cover.
3. Visually check the alignment of the two pulleys to make sure that they are aligned and that the V-belts are straight up and down (see **Figure 58**).
  - If the pulleys are aligned, tighten the motor mounts and go to **Step 8**.
  - If the pulleys are NOT aligned, do **Steps 4 & 5**.



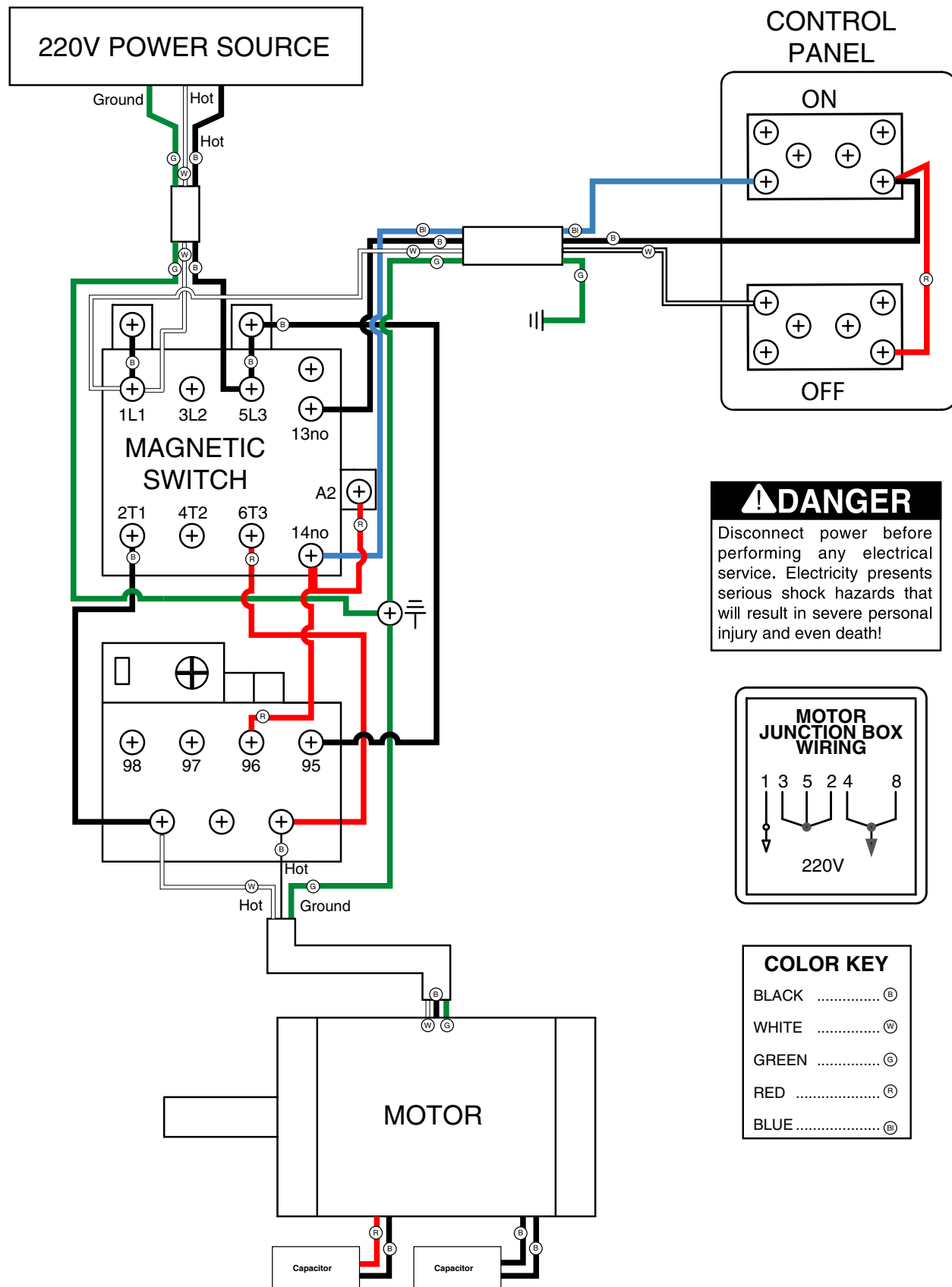
**Figure 58.** Pulleys aligned.

4. Loosen the fasteners that hold the motor to the brackets shown in **Figure 59**.
5. Shift the motor horizontally as needed to align the motor pulley with the cutterhead pulley.
6. Tighten the fasteners that hold the motor to the brackets. V-belts should be parallel and aligned as shown in **Figure 58**.
7. Adjust the pulleys again, if necessary, until they are coplanar (parallel and aligned) with each other.
8. Close the pulley cover.



**Figure 59.** Motor mount fasteners for adjusting pulley alignment.

# Wiring Diagram W1744



# Electrical Components

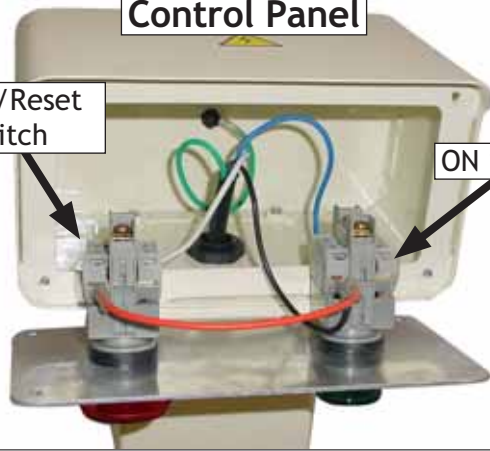
Motor Junction Box



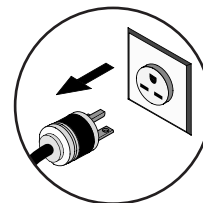
Control Panel

STOP/Reset Switch

ON Switch



# Troubleshooting



This section covers the most common problems and corrections with this type of machine. **WARNING! DO NOT** make any adjustments until power is disconnected and moving parts have come to a complete stop!

| PROBLEM  | POSSIBLE CAUSE  | CORRECTIVE ACTION   |
|--|---|---|
| Motor will not start.  | <ol style="list-style-type: none"> <li>1. Stop button depressed.</li> <li>2. Thermal overload protection tripped in magnetic switch.</li> <li>3. Low voltage.</li> <li>4. Open circuit in motor or loose connections.</li> </ol>                          | <ol style="list-style-type: none"> <li>1. Twist the stop button to allow it to pop out.</li> <li>2. Press the "Reset" button on the thermal overload relay, located inside the magnetic switch.</li> <li>3. Check power line for proper voltage.</li> <li>4. Inspect all lead connections on motor for loose or open connections.</li> </ol>  |
| Fuses or circuit breakers blow.  | <ol style="list-style-type: none"> <li>1. Short circuit in line cord or plug.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Repair or replace cord or plug for damaged insulation and shorted wires.</li> </ol>   |
| Motor overheats.   | <ol style="list-style-type: none"> <li>1. Motor overloaded.</li> <li>2. Air circulation through the motor restricted.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Reduce load on motor.</li> <li>2. Clean out motor to provide normal air circulation.</li> </ol>   |
| Motor stalls or shuts off during a cut.                                    | <ol style="list-style-type: none"> <li>1. Motor overloaded during operation.</li> <li>2. Thermal overload protection tripped in magnetic switch.</li> <li>3. Short circuit in motor or loose connections.</li> <li>4. Circuit breaker tripped.</li> </ol> | <ol style="list-style-type: none"> <li>1. Reduce load on motor; take lighter cuts.</li> <li>2. Press the "Reset" button on the thermal overload relay, located inside the magnetic switch.</li> <li>3. Repair or replace connections on motor for loose or shorted terminals or worn insulation.</li> <li>4. Install correct circuit breaker; reduce # of machines running on that circuit (circuit overload).</li> </ol> |
| Blade slows when cutting or makes squealing noise, especially on start-up. | <ol style="list-style-type: none"> <li>1. V-belt loose.</li> <li>2. V-belt worn out.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Tighten V-belt (<b>Page 39</b>).</li> <li>2. Replace V-belt (<b>Page 39</b>).</li> </ol>  |
| Loud, repetitious noise coming from machine.                               | <ol style="list-style-type: none"> <li>1. Pulley setscrews or keys are missing or loose.</li> <li>2. Motor fan is hitting the cover.</li> <li>3. V-belts are damaged.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Inspect keys and setscrews. Replace or tighten if necessary.</li> <li>2. Adjust fan cover mounting position, tighten fan, or shim fan cover.</li> <li>3. Replace V-belts (<b>Page 39</b>).</li> </ol>   |
| Vibration when running or cutting.   | <ol style="list-style-type: none"> <li>1. Loose or damaged blade.</li> <li>2. Damaged V-belt.</li> <li>3. Worn cutterhead bearings.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Tighten or replace blade.</li> <li>2. Replace.</li> <li>3. Check/replace cutterhead bearings.</li> </ol>  |

## Table

| PROBLEM                   | POSSIBLE CAUSE  | CORRECTIVE ACTION   |
|---------------------------|---|---|
| Tables are hard to adjust | <ol style="list-style-type: none"> <li>1. Table lock is engaged or partially engaged.</li> <li>2. Table stops blocking movement.</li> </ol> | <ol style="list-style-type: none"> <li>1. Completely loosen the table lock.</li> <li>2. Loosen/reset table positive stops.</li> </ol> |

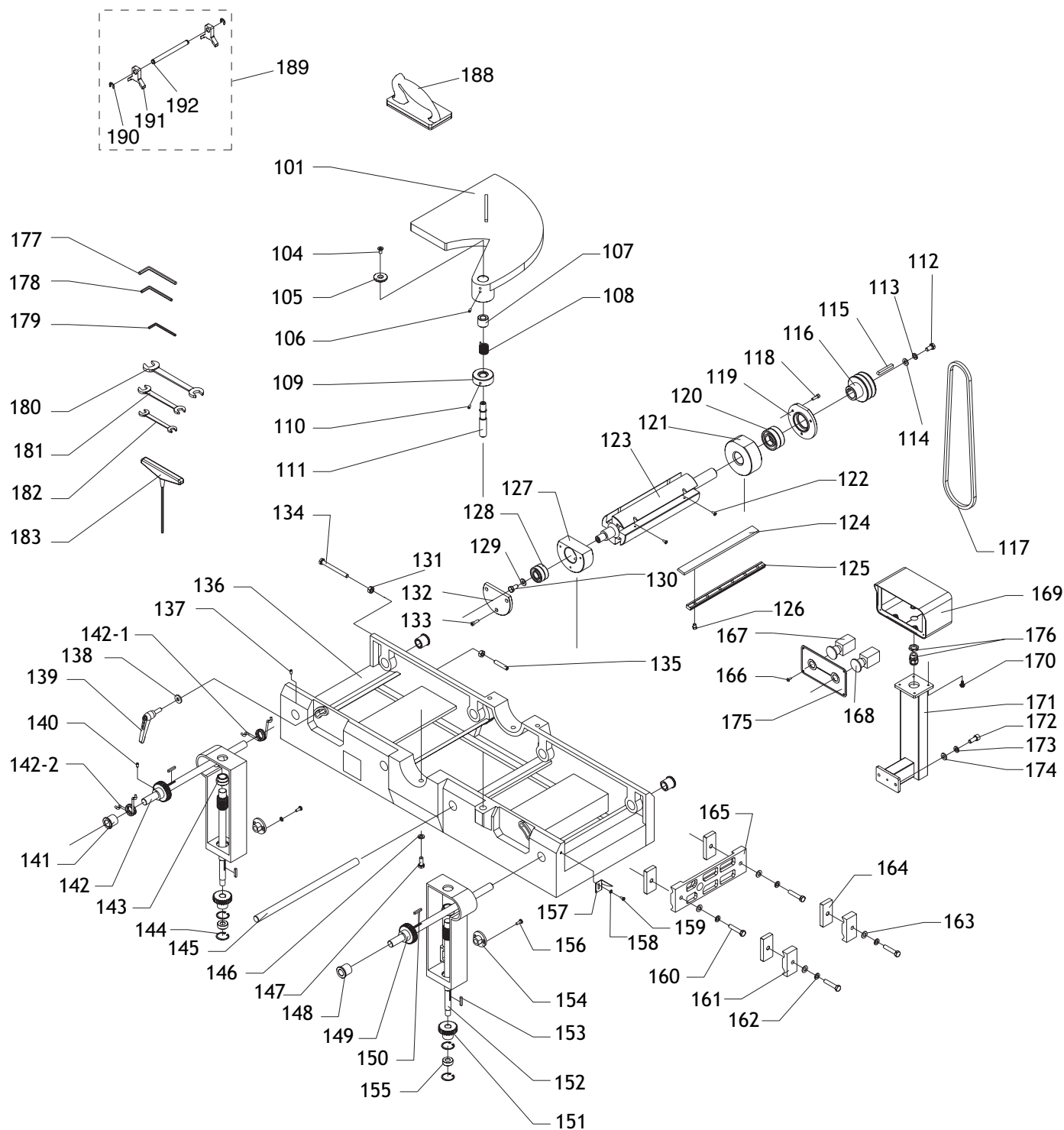


## Cutting

| PROBLEM  | POSSIBLE CAUSE   | CORRECTIVE ACTION   |
|--|--|---|
| Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut). | <ol style="list-style-type: none"> <li>1. Outfeed table is set too low.</li> <li>2. Operator pushing down on trailing end of the workpiece.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Align outfeed table with cutterhead knife at top dead center (<b>Page 17</b>).</li> <li>2. Reduce/eliminate downward pressure on that end of workpiece.</li> </ol>  |
| Workpiece stops in the middle of the cut.  | <ol style="list-style-type: none"> <li>1. Outfeed table is set too high.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Align outfeed table with cutterhead knife at top dead center (<b>Page 17</b>).</li> </ol>   |
| Chipping.  | <ol style="list-style-type: none"> <li>1. Knots or conflicting grain direction in wood.</li> <li>2. Nicked or chipped blades.</li> <li>3. Feeding workpiece too fast.</li> <li>4. Taking too deep of a cut.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Inspect workpiece for knots and grain (<b>Page 21</b>); only use clean stock.</li> <li>2. Adjust one of the nicked knives sideways; replace knives (<b>Page 31</b>).</li> <li>3. Slow down the feed rate.</li> <li>4. Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods.)</li> </ol>  |
| Fuzzy Grain.   | <ol style="list-style-type: none"> <li>1. Wood may have high moisture content or surface wetness.</li> <li>2. Dull knives.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Check moisture content and allow to dry if moisture is too high.</li> <li>2. Replace knives (<b>Page 31</b>).</li> </ol>  |
| Long lines or ridges that run along the length of the board                              | <ol style="list-style-type: none"> <li>1. Nicked or chipped knives.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Adjust one of the nicked knives sideways; replace knives (<b>Page 31</b>).</li> </ol>   |
| Uneven cutter marks, wavy surface, or chatter marks across the face of the board.        | <ol style="list-style-type: none"> <li>1. Feeding workpiece too fast.</li> <li>2. Knives not adjusted at even heights in the cutterhead.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Slow down the feed rate.</li> <li>2. Adjust the knives so they are set up evenly in the cutterhead (<b>Page 31</b>).</li> </ol>   |
| Board edge is concave or convex after jointing.  | <ol style="list-style-type: none"> <li>1. Board not held with even pressure on infeed and outfeed table during cut.</li> <li>2. Board started too uneven.</li> <li>3. Board has excessive bow or twist along its length.</li> <li>4. Insufficient number of passes.</li> </ol> | <ol style="list-style-type: none"> <li>1. Hold board with even pressure as it moves over the cutterhead.</li> <li>2. Take partial cuts to remove the extreme high spots before doing a full pass.</li> <li>3. Surface plane one face so there is a good surface to position against the fence.</li> <li>4. It may take 3 to 5 passes to achieve a perfect edge, depending on the starting condition of the board and the depth of cut.</li> </ol> |
| Uneven cut or breakout when rabbeting.   | <ol style="list-style-type: none"> <li>1. Uneven feed rate.</li> <li>2. Depth of cut too deep.</li> <li>3. Knives not adjusted evenly with each other in the cutterhead.</li> <li>4. Nicked or chipped knives.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Feed the board evenly and smoothly during the cut.</li> <li>2. Raise the infeed table to take a smaller depth of cut. Never exceed <math>\frac{1}{16}</math>" per pass when rabbeting.</li> <li>3. Adjust the knives so they are set up evenly in the cutterhead (<b>Page 31</b>).</li> <li>4. Adjust one of the nicked knives sideways; replace knives (<b>Page 31</b>).</li> </ol>                    |



# Base Assembly

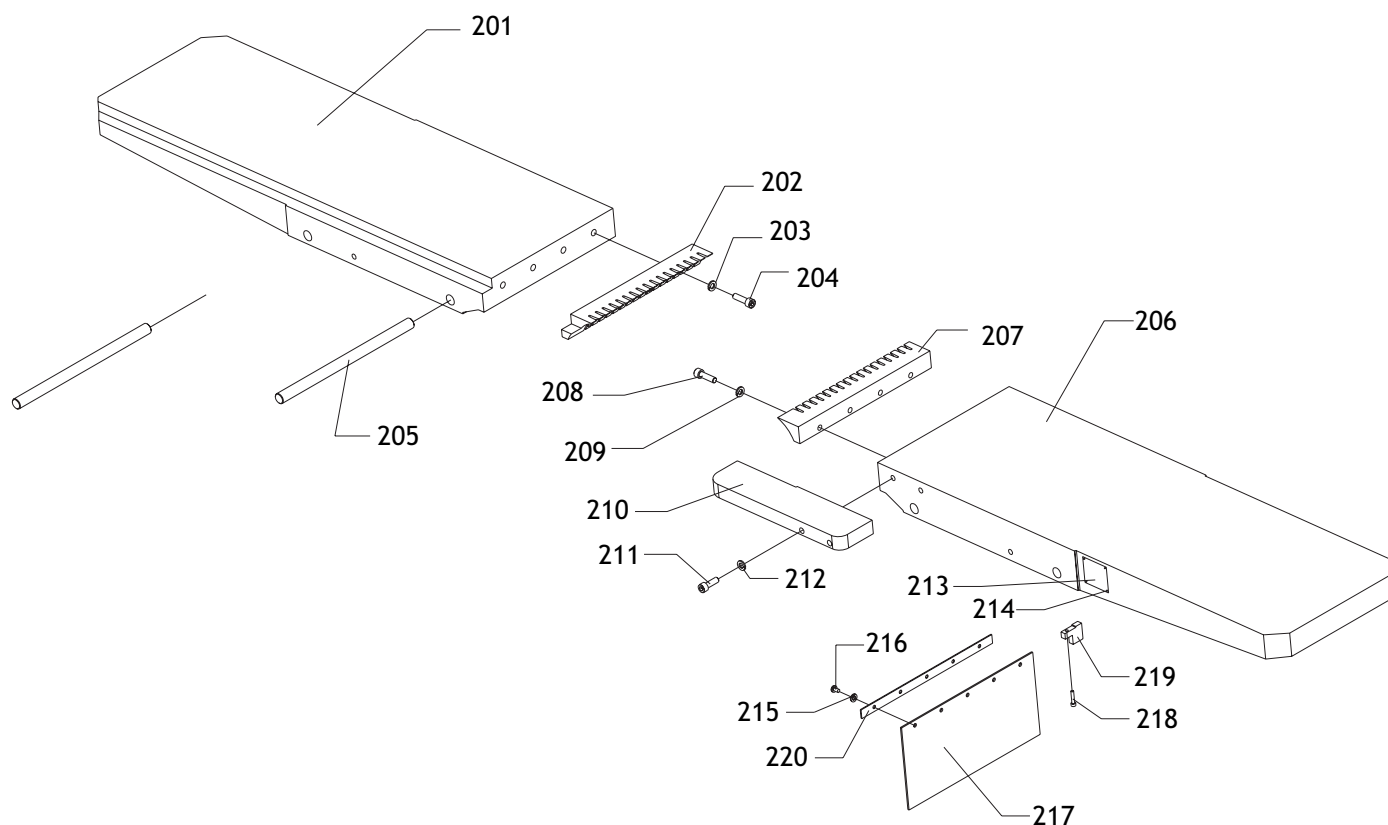


# Base Parts List

| REF   | PART #     | DESCRIPTION                  |
|-------|------------|------------------------------|
| 101   | X1744101   | CUTTERHEAD GUARD             |
| 104   | XPFH23M    | FLAT HD SCR M8-1.25 X 16     |
| 105   | X1744105   | SPECIAL FLAT WASHER          |
| 106   | XPSS04M    | SET SCREW M6-1 X 12          |
| 107   | X1744107   | ADAPTER                      |
| 108   | X1744108   | TORSION SPRING               |
| 109   | X1744109   | SHAFT COLLAR                 |
| 110   | XPSS04M    | SET SCREW M6-1 X 12          |
| 111   | X1744111   | SHAFT                        |
| 112   | X1744112   | CUTTERHEAD SCREW             |
| 113   | XPLW06M    | LOCK WASHER 10MM             |
| 114   | XPW04M     | FLAT WASHER 10MM             |
| 115   | XPB111     | KEY 8 X 8 X 60               |
| 116   | X1744116   | CUTTERHEAD PULLEY            |
| 117   | XPVA55     | V-BELT A-55 4L550            |
| 118   | XPSB02M    | CAP SCREW M6-1 X 20          |
| 119   | X1744119   | BEARING COVER                |
| 120   | XP6206     | BALL BEARING 6206ZZ          |
| 121   | X1744121   | BEARING SUPPORT              |
| 122   | XPFH05M    | FLAT HEAD SCREW M5-.8 X 12   |
| 123   | X1744123   | CUTTERHEAD                   |
| 124   | X1744124   | KNIFE                        |
| 125   | X1744125   | KNIFE BAR (GIB)              |
| 126   | X1744126   | KNIFE LOCK SCREW (GIB SCREW) |
| 127   | X1744127   | BEARING SUPPORT              |
| 128   | XP62042RZ  | BALL BEARING 62042RZ         |
| 129   | XPW01M     | FLAT WASHER 8MM              |
| 130   | X1744130   | CUTTERHEAD SCREW             |
| 131   | XPB02M     | HEX NUT M10-1.5              |
| 132   | X1744132   | BEARING COVER                |
| 133   | XPSB02M    | CAP SCREW M6-1 X 20          |
| 134   | XPB156     | HEX BOLT M10-1.5 X 150       |
| 135   | XPSS71M    | SET SCREW M10-1.5 X 60       |
| 136   | X1744136   | BASE                         |
| 137   | XPSS04M    | SET SCREW M6-1 X 12          |
| 138   | XPW04M     | FLAT WASHER 10MM             |
| 139   | X1744139   | LOCK HANDLE                  |
| 140   | XPSS03M    | SET SCREW M6-1 X 8           |
| 141   | X1744141   | ECCENTRIC BUSHING            |
| 142   | X1744142   | SHAFT                        |
| 142-1 | X1744142-1 | LEFT TORSION SPRING          |
| 142-2 | X1744142-2 | RIGHT TORSION SPRING         |
| 143   | X1744143   | STOP BLOCK                   |
| 144   | X1744144   | INTERIOR RETAINING RING 35MM |

| REF | PART #    | DESCRIPTION               |
|-----|-----------|---------------------------|
| 145 | X1744145  | SHAFT                     |
| 146 | XPLW06M   | LOCK WASHER 10MM          |
| 147 | XPB32M    | HEX BOLT M10-1.5 X 25     |
| 148 | X1744148  | BUSHING                   |
| 149 | X1744149  | WORM GEAR                 |
| 150 | XPB12M    | KEY 5 X 5 X 30MM          |
| 151 | X1744151  | GEAR                      |
| 152 | X1744152  | WORM                      |
| 153 | XPB112    | KEY 4 X 4 X 35            |
| 154 | X1744154  | SLIDE STOP BLOCK          |
| 155 | XP62022RZ | BALL BEARING 62022RZ      |
| 156 | X1744156  | SPECIAL FLAT SCREW        |
| 157 | X1744157  | POINTER                   |
| 158 | XPW02M    | FLAT WASHER 5MM           |
| 159 | XPS09M    | PHLP HD SCR M5-.8 X 10    |
| 160 | XPB73M    | HEX BOLT M10-1.5 X 50     |
| 161 | X1744161  | CLAMP BLOCK               |
| 162 | XPLW06M   | LOCK WASHER 10MM          |
| 163 | XPW04M    | FLAT WASHER 10MM          |
| 164 | X1744164  | CLAMPING BLOCK            |
| 165 | X1744165  | CLAMP PLATE               |
| 166 | XPBTEK4M  | TAP SCREW M4 X 8          |
| 167 | X1744167  | STOP BUTTON               |
| 168 | X1744168  | START BUTTON              |
| 169 | X1744169  | SWITCH BOX                |
| 170 | XPB514M   | FLANGE SCREW M8-1.25 X 16 |
| 171 | X1744171  | SWITCH BOX BRACKET        |
| 172 | XPSB64M   | CAP SCREW M10-1.5 X 25    |
| 173 | XPLW06M   | LOCK WASHER 10MM          |
| 174 | XPW04M    | FLAT WASHER 10MM          |
| 175 | X1744175  | BUTTON PLATE              |
| 176 | X1744176  | BALL STRAIN RELIEF        |
| 177 | XPAW10M   | HEX WRENCH 10MM           |
| 178 | XPAW08M   | HEX WRENCH 8MM            |
| 179 | XPAW03M   | HEX WRENCH 3MM            |
| 180 | XPWR1719  | COMBO WRENCH 17/19MM      |
| 181 | XPWR1214  | COMBO WRENCH 12/14MM      |
| 182 | XPWR1012  | COMBO WRENCH 10/12MM      |
| 183 | X1744183  | T-HANDLE 4MM              |
| 188 | X1744188  | PUSH BLOCK                |
| 189 | X1744189  | KNIFE GAUGE ASSEMBLY      |
| 190 | XPR39M    | EXT RETAINING RING 8MM    |
| 191 | X1744191  | KNIFE GAUGE BLOCK         |
| 192 | X1744192  | KNIFE GAUGE ROD           |

# Table Assembly

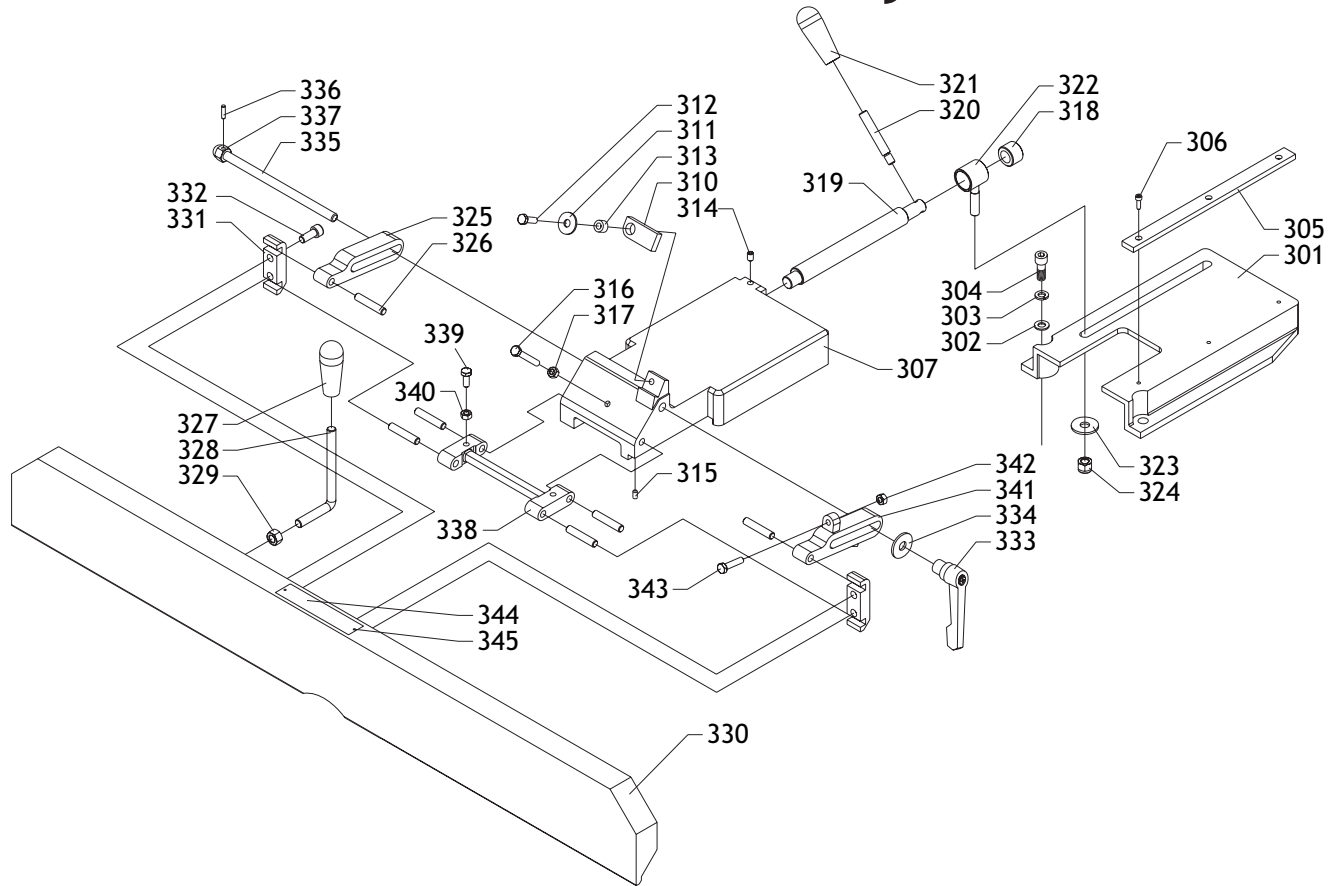


## Table Parts List

| REF | PART #   | DESCRIPTION            |
|-----|----------|------------------------|
| 201 | X1744201 | TABLE (LEFT)           |
| 202 | X1744202 | TABLE LIP (LEFT)       |
| 203 | XPLW06M  | LOCK WASHER 10MM       |
| 204 | XPSB84M  | CAP SCREW M10-1.5 X 35 |
| 205 | X1744205 | SHAFT                  |
| 206 | X1744206 | TABLE (RIGHT)          |
| 207 | X1744207 | TABLE LIP (RIGHT)      |
| 208 | XPSB84M  | CAP SCREW M10-1.5 X 35 |
| 209 | XPLW06M  | LOCK WASHER 10MM       |
| 210 | X1744210 | RABBETING ARM          |

| REF | PART #   | DESCRIPTION            |
|-----|----------|------------------------|
| 211 | XPSB72M  | CAP SCREW M10-1.5 X 30 |
| 212 | XPLW06M  | LOCK WASHER 10MM       |
| 213 | X1744213 | DEPTH SCALE            |
| 214 | X1744214 | 2 X 4 RIVET            |
| 215 | XPW03M   | FLAT WASHER 6MM        |
| 216 | XPSB04M  | CAP SCREW M6-1.0 X 10  |
| 217 | X1744217 | DUST DEFLECTOR         |
| 218 | XPSB38M  | CAP SCREW M5-.8 X 25   |
| 219 | X1744219 | STOP BLOCK             |
| 220 | X1744220 | BAR                    |

# Fence Assembly

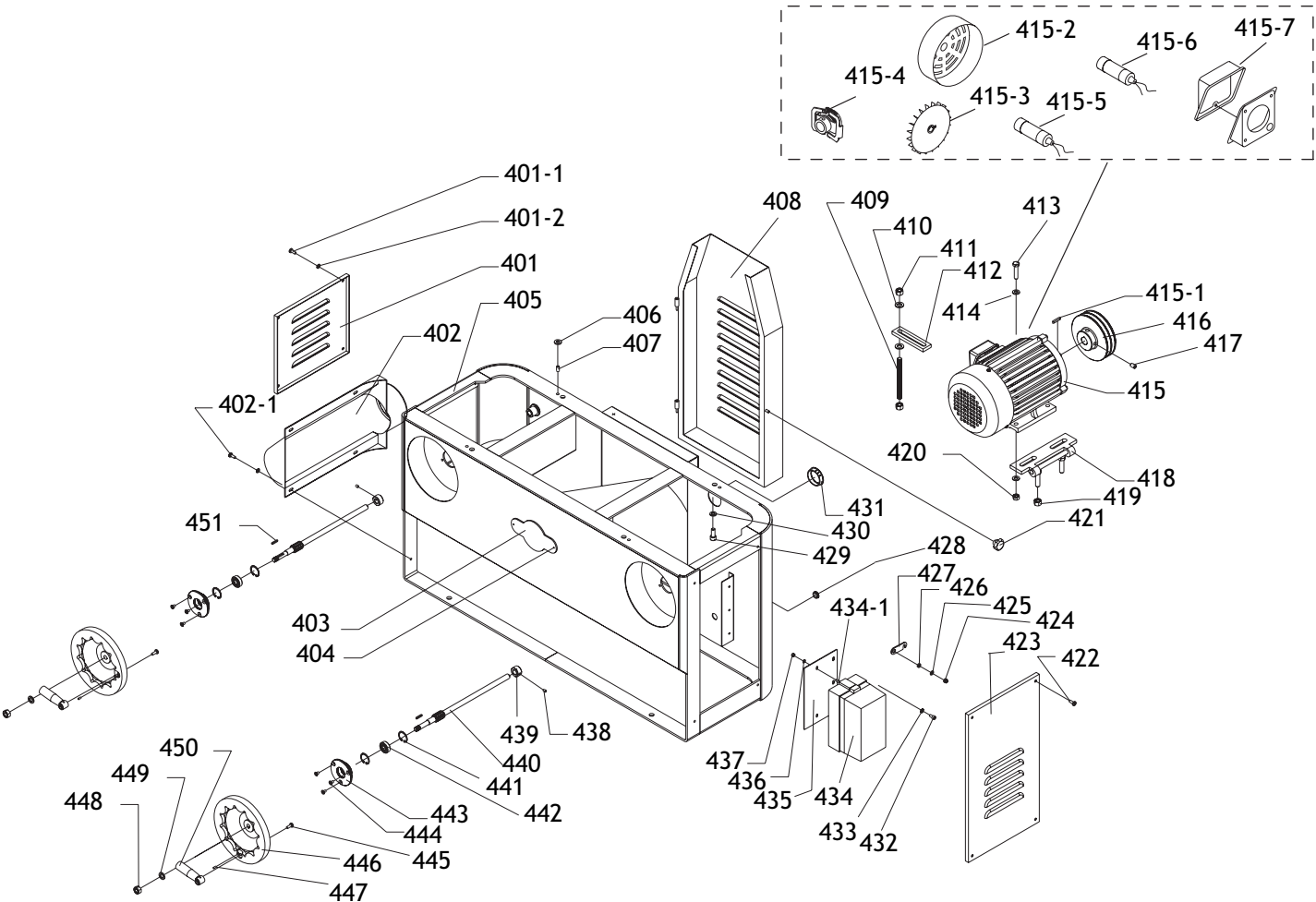


## Fence Parts List

| REF | PART #   | DESCRIPTION             |
|-----|----------|-------------------------|
| 301 | X1744301 | FENCE BRACKET           |
| 302 | XPW06M   | FLAT WASHER 12MM        |
| 303 | XPLW05M  | LOCK WASHER 12MM        |
| 304 | XPSB77M  | CAP SCREW M12-1.75 X 30 |
| 305 | X1744305 | SLIDING RAIL            |
| 306 | XPSB20M  | CAP SCREW M5-.8 X 14    |
| 307 | X1744307 | SLIDING BRACKET         |
| 310 | X1744310 | BLOCK                   |
| 311 | XPW01M   | FLAT WASHER 8MM         |
| 312 | XPB07M   | HEX BOLT M8-1.25 X 25   |
| 313 | X1744313 | COLLAR                  |
| 314 | XPSS14M  | SET SCREW M8-1.25 X 12  |
| 315 | XPSS04M  | SET SCREW M6-1 X 12     |
| 316 | XPB30M   | HEX BOLT M8-1.25 X 55   |
| 317 | XPN03M   | HEX NUT M8-1.25         |
| 318 | X1744318 | COLLAR                  |
| 319 | X1744319 | ECCENTRIC SHAFT         |
| 320 | X1744320 | HANDLE ROD              |
| 321 | X1744321 | HANDLE                  |
| 322 | X1744322 | SLIDING BUSHING ASSY    |
| 323 | XPW06M   | FLAT WASHER 12MM        |
| 324 | X1744324 | SPECIAL HEX NUT M12     |

| REF | PART #   | DESCRIPTION              |
|-----|----------|--------------------------|
| 325 | X1744325 | LEFT BRACKET             |
| 326 | X1744326 | PIN                      |
| 327 | X1744327 | HANDLE                   |
| 328 | X1744328 | HANDLE ROD               |
| 329 | XPN09M   | HEX NUT M12-1.75         |
| 330 | X1744330 | FENCE                    |
| 331 | X1744331 | CLAMP                    |
| 332 | XPSB64M  | CAP SCREW M10-1.5 X 25   |
| 333 | X1744333 | LOCK LEVER ASSY          |
| 334 | XPLW05M  | FLAT WASHER 12MM         |
| 335 | X1744335 | DOUBLE END THREADED ROD  |
| 336 | XPRP03M  | ROLL PIN 5 X 20          |
| 337 | X1744337 | M12 SPECIAL NUT          |
| 338 | X1744338 | SUPPORT BRACKET          |
| 339 | XPB09M   | HEX BOLT M8-1.25 x 20    |
| 340 | XPN03M   | HEX NUT M8-1.25          |
| 341 | X1744341 | RIGHT BRACKET            |
| 342 | XPN03M   | HEX NUT M8-1.25          |
| 343 | XPB20M   | HEX BOLT M8-1.25 X 35    |
| 344 | X1744344 | CUTTERHEAD WARNING LABEL |
| 345 | X1744345 | 2 X 5 RIVET              |

# Stand Assembly

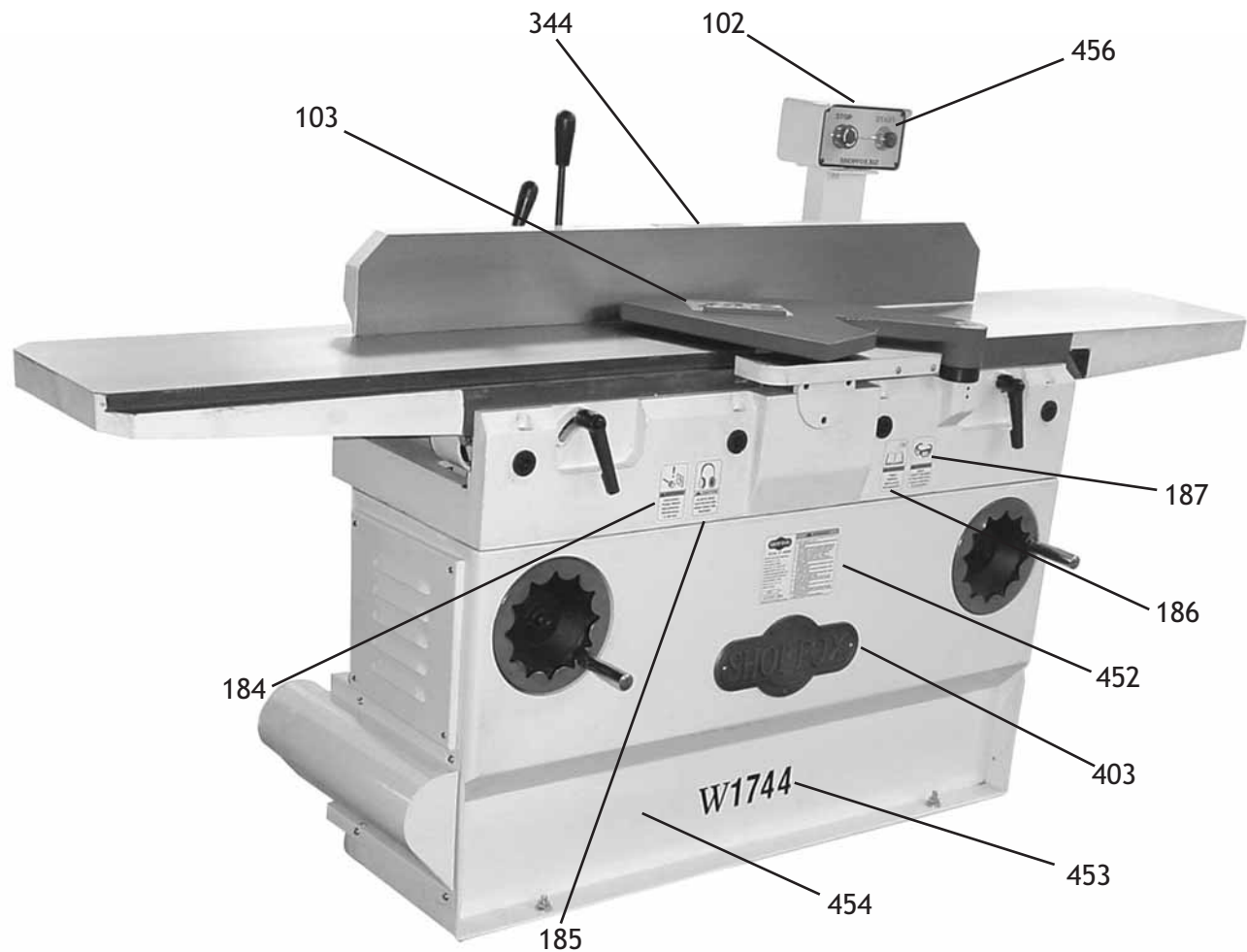


# Stand Parts List

| REF   | PART #     | DESCRIPTION                   |
|-------|------------|-------------------------------|
| 401   | X1744401   | LEFT ACCESS DOOR              |
| 401-1 | XPSBS18M   | BUTTON HD CAP SCR M6-1 X 18   |
| 401-2 | XPW03M     | FLAT WASHER 6MM               |
| 402   | X1744402   | DUST HOOD                     |
| 402-1 | XPSBS11M   | BUTTON HD CAP SCR M6-1 X 10   |
| 403   | X1744403   | SHOP FOX LOGO PLATE           |
| 404   | XPHTEK4M   | TAP SCREW M4 X 8              |
| 405   | X1744405   | CABINET                       |
| 406   | X1744406   | RUBBER WASHER 8MM             |
| 407   | XPSS80M    | SET SCREW M8-1.25 X 15        |
| 408   | X1744408   | PULLEY COVER                  |
| 409   | X1744409   | TENSION ROD                   |
| 410   | XPW06M     | FLAT WASHER 12MM              |
| 411   | XPN09M     | M12-1.75 HEX NUT              |
| 412   | X1744412   | TENSION PLATE                 |
| 413   | XPB116M    | HEX BOLT M10-1.5 X 45         |
| 414   | XPW04M     | FLAT WASHER 10MM              |
| 415   | X1744415   | MOTOR                         |
| 415-1 | X1744415-1 | KEY 5 X 5 X 45                |
| 415-2 | X1744415-2 | MOTOR FAN COVER               |
| 415-3 | X1744415-3 | MOTOR FAN                     |
| 415-4 | X1744415-4 | CENTRIFUGAL SWITCH            |
| 415-5 | X1744415-5 | START CAPACITOR 500MFD 125VAC |
| 415-6 | X1744415-6 | RUN CAPACITOR 20MFD 250VAC    |
| 415-7 | X1744415-7 | JUNCTION BOX                  |
| 416   | X1744416   | MOTOR PULLEY                  |
| 417   | XPSS75M    | SET SCREW M10-1.5 X 16        |
| 418   | X1744418   | MOTOR BRACKET                 |
| 419   | XPN09M     | HEX NUT M12-1.75              |
| 420   | XPN02M     | HEX NUT M10-1.5               |
| 421   | X1744421   | PULLEY COVER LOCK KNOB        |

| REF   | PART #   | DESCRIPTION                 |
|-------|----------|-----------------------------|
| 422   | XPSBS18M | BUTTON HD CAP SCR M6-1 X 18 |
| 423   | X1744423 | RIGHT ACCESS DOOR           |
| 424   | X1744424 | SPECIAL HEX NUT M6          |
| 425   | XPW03M   | FLAT WASHER 6MM             |
| 426   | X1744426 | ADAPTOR                     |
| 427   | X1744427 | LATCH                       |
| 428   | X1744428 | SMALL STRAIN RELIEF         |
| 429   | XPSB88M  | CAP SCREW M10-1.25 X 25     |
| 430   | XPLW06M  | LOCK WASHER 10MM            |
| 431   | X1744431 | BIG STRAIN RELIEF           |
| 432   | XPSB04M  | CAP SCREW M6-1 X 10         |
| 433   | XPW03M   | FLAT WASHER 6MM             |
| 434   | X1744434 | MAGNETIC SWITCH             |
| 434-1 | XPS06M   | PHLP HD SCR M5-.8 x 20      |
| 435   | X1744435 | SWITCH PLATE                |
| 436   | XPW02M   | FLAT WASHER 5MM             |
| 437   | XPN06M   | HEX NUT M5-.8               |
| 438   | XPSS03M  | SET SCREW M6-1 X 8          |
| 439   | X1744439 | COLLAR                      |
| 440   | X1744440 | SPIRAL GEAR SHAFT           |
| 441   | XPR29M   | INT RETAINING RING 32MM     |
| 442   | XP6201   | BALL BEARING 6201           |
| 443   | X1744443 | BEARING SUPPORT             |
| 444   | XPFH04M  | FLAT HEAD SCR M6-1 X 8      |
| 445   | XPFS14M  | FLANGE SCREW M6-1 X 16      |
| 446   | X1744446 | HANDWHEEL                   |
| 447   | XPRP78M  | ROLL PIN 4 X 10             |
| 448   | XPN09M   | HEX NUT M12-1.75            |
| 449   | XPW06M   | FLAT WASHER 12MM            |
| 450   | X1744450 | FOLDING HANDLE              |
| 451   | XPB34M   | KEY 5 X 5 X 20              |

# Warning Label Parts List



| REF | PART #    | DESCRIPTION                    |
|-----|-----------|--------------------------------|
| 102 | X1744102  | ELECTRICITY LABEL              |
| 103 | X1744103  | CUTTERHEAD GUARD WARNING LABEL |
| 184 | XLABEL02B | UNPLUG POWER 220-440 LABEL     |
| 185 | XLABEL15  | EAR PROTECTION LABEL           |
| 186 | XLABEL08  | READ MANUAL LABEL              |
| 187 | XLABEL01  | SAFETY GLASSES LABEL           |

| REF | PART #      | DESCRIPTION                 |
|-----|-------------|-----------------------------|
| 344 | X1744344    | CUTTERHEAD WARNING LABEL    |
| 403 | X1744403    | SHOP FOX LOGO PLATE         |
| 452 | X1744452    | MACHINE ID LABEL            |
| 453 | X1744453    | MODEL NUMBER LABEL          |
| 454 | XPAINTSF701 | PAINT FOR SHOP FOX MACHINES |
| 456 | X1744456    | CONTROL PANEL FACE          |

## WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact **SHOP FOX®** at (360) 734-3482 or [www.shopfoxtools.com](http://www.shopfoxtools.com) to order new labels.







# Warranty Registration

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone # \_\_\_\_\_ Email \_\_\_\_\_ Invoice # \_\_\_\_\_

Model # \_\_\_\_\_ Serial # \_\_\_\_\_ Dealer Name \_\_\_\_\_ Purchase Date \_\_\_\_\_

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

\_\_\_\_\_ Advertisement

\_\_\_\_\_ Friend

\_\_\_\_\_ Local Store

\_\_\_\_\_ Mail Order Catalog

\_\_\_\_\_ Website

\_\_\_\_\_ Other:

2. How long have you been a woodworker/metalworker?

\_\_\_\_\_ 0-2 Years

\_\_\_\_\_ 2-8 Years

\_\_\_\_\_ 8-20 Years

\_\_\_\_\_ 20+ Years

3. How many of your machines or tools are Shop Fox®?

\_\_\_\_\_ 0-2

\_\_\_\_\_ 3-5

\_\_\_\_\_ 6-9

\_\_\_\_\_ 10+

4. Do you think your machine represents a good value?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

5. Would you recommend Shop Fox® products to a friend?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

6. What is your age group?

\_\_\_\_\_ 20-29

\_\_\_\_\_ 30-39

\_\_\_\_\_ 40-49

\_\_\_\_\_ 50-59

\_\_\_\_\_ 60-69

\_\_\_\_\_ 70+

7. What is your annual household income?

\_\_\_\_\_ \$20,000-\$29,000

\_\_\_\_\_ \$30,000-\$39,000

\_\_\_\_\_ \$40,000-\$49,000

\_\_\_\_\_ \$50,000-\$59,000

\_\_\_\_\_ \$60,000-\$69,000

\_\_\_\_\_ \$70,000+

8. Which of the following magazines do you subscribe to?

\_\_\_\_\_ Cabinet Maker

\_\_\_\_\_ Popular Mechanics

\_\_\_\_\_ Today's Homeowner

\_\_\_\_\_ Family Handyman

\_\_\_\_\_ Popular Science

\_\_\_\_\_ Wood

\_\_\_\_\_ Hand Loader

\_\_\_\_\_ Popular Woodworking

\_\_\_\_\_ Wooden Boat

\_\_\_\_\_ Handy

\_\_\_\_\_ Practical Homeowner

\_\_\_\_\_ Woodshop News

\_\_\_\_\_ Home Shop Machinist

\_\_\_\_\_ Precision Shooter

\_\_\_\_\_ Woodsmith

\_\_\_\_\_ Journal of Light Cont.

\_\_\_\_\_ Projects in Metal

\_\_\_\_\_ Woodwork

\_\_\_\_\_ Live Steam

\_\_\_\_\_ RC Modeler

\_\_\_\_\_ Woodworker West

\_\_\_\_\_ Model Airplane News

\_\_\_\_\_ Rifle

\_\_\_\_\_ Woodworker's Journal

\_\_\_\_\_ Modeltec

\_\_\_\_\_ Shop Notes

\_\_\_\_\_ Other:

\_\_\_\_\_ Old House Journal

\_\_\_\_\_ Shotgun News

9. Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

FOLD ALONG DOTTED LINE

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Place  
Stamp  
Here



WOODSTOCK INTERNATIONAL INC.  
P.O. BOX 2309  
BELLINGHAM, WA 98227-2309



FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

# Warranty

Woodstock International, Inc. warrants all **SHOP FOX®** machinery to be free of defects from workmanship and materials for a period of two years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or reimbursement of third party expenses incurred.

Woodstock International, Inc. will repair or replace, at its expense and at its option, the **SHOP FOX®** machine or machine part which in normal use has proven to be defective, provided that the original owner returns the product prepaid to the **SHOP FOX®** factory service center or authorized repair facility designated by our Bellingham, WA office, with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.'s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that **SHOP FOX®** machinery complies with the provisions of any law or acts. In no event shall Woodstock International, Inc.'s liability under this warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

Every effort has been made to ensure that all **SHOP FOX®** machinery meets high quality and durability standards. We reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.



## High Quality Machines and Tools

Woodstock International, Inc. carries thousands of products designed to meet the needs of today's woodworkers and metalworkers.

Ask your dealer about these fine products:

**BROSMA**  
PRECISION STOP BLOCK

**JOINTER PAL®**

**Rotacator®**

**THE REBEL®**

**DURASTICK®**

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**BOARD BUDDIES®**

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ABRASIVE BELT & DISC CLEANER

**ACCU-SHARP®**

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**STEELEX®**  
FINE TOOLS



**STEELEX®**  
*PLUS*

**WHOLESALE ONLY**

**WOODSTOCK INTERNATIONAL, INC.**

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